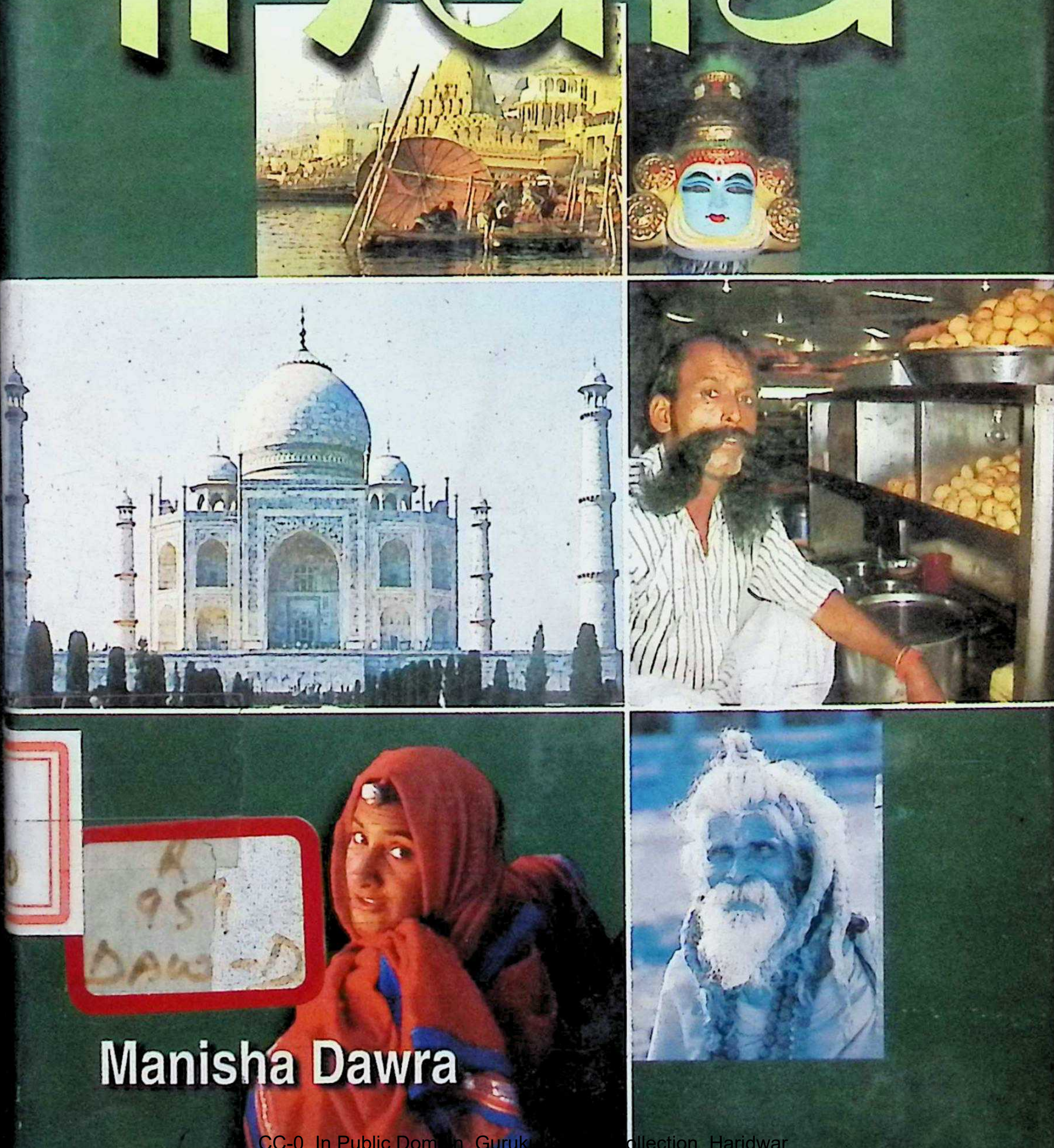
DISCOVER india



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Manisha Dawra

DISCOVER INDIA

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The handbook on India has been written from both the theoretical and practical aspects. It is written for those administrators who are active in the profession today as well as for those who desire to learn about India. This book is written in the interest of providing the history of India assistance in planning, religion, culture and heritage, indian cooking, constitutional system and law. The book also covers basic areas such as general administration, defence, national symbols, tourism and technology.

Contents

- Indian History
- Structure of India
- Nation Pride
- Law and Order
- Indian Defence
- Constitutional System
- Science and Technology
- Indian Cooking
- Culture and Heritage
- Religion, Sports and Education

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गुरुकुल कांगड़ी विश्वविद्यालय
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शीर्षक Discover India

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गुरूकुल कांगड़ी विश्वविद्यालय, हरिद्वार

वर्ग संख्या .... आगत संख्या..............

पुस्तक विवरण की तिथि नीचे अंकित है। इस तिथि सहित 30 वें दिन यह पुस्तक पुस्तकालय में वापस आ जानी चाहिए अन्यथा 50 पैसे प्रति दिन के हिसाब से विलम्ब दण्ड लगेगा।

Discover India

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Manisha Dawra

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PREFACE

The student and the general reader alike still greatly need a volume which provides them with a brief but connected narrative of modern Indian history; a knowledge of the past is an essential to an understanding of the present; and so the purpose of this volume is to explain how the India of our fathers has been transformed into the India of our own day, to sketch the causes which have produced this remarkable change, and to outline the manner of their operation. It is not an easy task. In so complicated a story much must be left untold; amid a multiplicity of causes some must be omitted, some may be mistaken; above all the principle figures of recent events are still distorted by the passion of conflict and obscured by the dust of controversy. But in spite of these disadvantages, I hope that an attempt to tell the story dispassionately may not lack its uses, if only to point the moral that although men may commit crimes, they are much more likely to commit blunders.

The greater part of the material on which the present work is based consists of printed matter — the correspondence of the leading actors, the official correspondence and other documents of the Parliamentary Papers and official reports, and the documents issued by the Government of India.

The purpose of the volume is to provide a continuation of a series of texts that presents research in discovering of India. I hope that the text will also be of interest to scholars and practitioners in a wide variety of fields, including social psychology, health psychology, behavioral medicine, political science, tourism, cocking and cognitive psychology.

Manisha Dawra

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1

INDIAN HISTORY

ANCIENT–HISTORY

Archaeological excavations have brought to light the remains of a highly developed urban civilisation in ancient India, that stretched across approximately 1520 kilometres, extending from the area on the upper Sutlaj in contemporary Punjab to Lothal in Gujarat. Historians are of the view that this civilisation flourished in the third millennium before the birth of Christ.

It is known by the name of the two of its great cities – Harappa and Mohenjodaro situated on the left and the right bank respectively of the river Ravi in Punjab. The two cities were built on a similar plan – houses constructed with standard burnt bricks arranged in squares, along roads intersecting at right angles. The houses varied in size but were all based on the same plan – a small courtyard surrounded by rooms with entrances in side alleys, often multistoried with no windows opening out to the street. The houses had bathrooms and the drains flowing out were connected to covered sewers with soak-pits. This unique sewage system is amongst the most impressive achievements of the Indus people and sets them apart from all other ancient civilisations.

By about 1500 B.C. an important change began to occur in the northern half of the Indian sub-continent. The Harappa culture in the Indus Valley had declined by about 1750 B.C., and the stage was being set for a second and more continuous urbanisation in the Ganges Valley.

The earliest literary source that sheds light on India's past is the Rig Veda. It is difficult to date this work with any accuracy on the basis of tradition and ambiguous astronomical information contained in the hymns. It is most likely that Rig Veda was composed between 1,500 B.C. and 1,000 B.C.

The people who composed these evocative hymns to nature and celebrated life exuberantly referred to themselves as Aryas usually anglicised as Aryan meaning 'superior'.

The 6th Century B.C. was a period of great ferment in India. The kingdom of Magadh – one of the 16 great janapadas – polities – had established paramountcy over other kingdoms of the Ganges Valley. This was the time when Buddhism and Jainism emerged as popular protestant movements to pose a serious challenge to Brahmanic orthodoxy. The fluid political situation, made it possible for Chandragupta Maurya (reign – 322-298 B.C.) to out the oppressive ruler of Magadh and found his own dynasty.

The most famous of the Mauryas is Ashoka the Great (reign – 273-232 B.C.). He extended the boundaries of his empire considerably – stretching from Kashmir and Peshawar in the North and Northwest to Mysore in the South and Orissa in the East – but his fame rests not so much on military conquests as on his celebrated renunciation of war. After witnessing the carnage at the battle field of Kalinga (269 B.C.) in Orissa, Ashoka resolved to dedicate himself to Dhamma – or righteousness.

Ashoka died around 232 B.C. and the empire began to disintegrate under weak successors. Pushyamitra Shunga, a Brahmin general usurped the throne after slaying the last Maurya king and presided over a loosely federal polity. In subsequent centuries India suffered a series of invasions, and in the absence of a strong central authority, often fell under the spell of foreign rulers – Indo Bactrians, the Sakas and others.

For the next four hundred years, India remained politically disunited and weak. It was repeatedly raided and plundered by foreigners. Stability was restored by the Guptas. Exploits of Samudra Gupta (reign – 335 - 380 A.D.) – an illustrious ruler of this line – are recorded on a stone inscription at Allahabad.

It was Chandra Gupta II (reign – 380-412 A.D.) – Samudra Gupta's successor – who finally defeated the Sakas and re-established a strong central authority. His reign registered the high watermark in Indian culture. His accomplishments in war and peace were glorious enough for him to claim the title Vikramaditya – the resplendent, great and good king of legends. Fa-hien, a Chinese traveller who was in India from 399 - 414 A.D. has left an interesting account of contemporary India. This age of peace and prosperity witnessed an unprecedented flowering of art, literature and the sciences.

Kalidas, the famous Sanskrit poet and dramatist, author of Abhijnana Shankuntalam, Kumarsambhavam and Meghadutam is believed to have adorned the Gupta court. Mathematicians like Aryabhatta and astronomers like Varahmihir lived during this period. The dazzling wall paintings of Ajanta too are traced back to this era. This period also saw the beginning of Hindu temple architecture.

The twilight of the Gupta Empire saw the setting in of decay. Powerful feudal governors in the provinces declared their independence. Trade and commerce suffered and social evils crept in. There was only a brief afterglow in the time of Harshavardhan (reign – 604-647 A.D.) – of Kannauj – who is famous for his philanthrophy and patronage of Buddhism. Himself an accomplished writer, he encouraged eminent dramatists like Bana. A Chinese traveller Huen-tsang visited India from (629-645 A.D.) during the rule of Harshavardhan. His account gives us an opportunity to note the changes that had taken place in the lives of the Indian people since the days of the Guptas.

In the Deccan, the Cholas ruled over what today are the districts of Thanjavur and Tiruchirapally. In the 2nd Century B.C. a Chola prince conquered Sri Lanka. The Pandyas reigned around present day Tirunelvelli and Madurai. A Pandyan king sent an ambassador to the court of the Roman emperor Augustus in first Century B.C. The territory under the Cheras was what constitutes the present day central and northern Kerala.

Pallavas of Kanchi rose to prominence in the 4th Century A.D. and ruled unchallenged for about four hundred years. The Nayanar and Alvar saint poets belong to this period. The gemlike shore temples at Mahabalipuram date to this period.

The Cholas overthrew the Pallavas in the 9th Century and regained political primacy in south India. The exquisitely crafted Chola bronzes – the resplendent Natraja – the Dancing Shiva – have introduced the world to the glory of the Cholas. The tide of political fortunes turned once again in the 13th Century to make the Pandyas dominant. Their kingdom became a great centre of international trade. Art, literature and culture flourished under generous patronage. The 15th Century saw the decline of the Pandyas.

MEDIEVAL INDIA

The period following the death of Harsha is known as the Rajput period. The word Rajput connotes the scion of a royal family and these princes claimed descent from the sun or the moon. This was an era of chivalry and feudalism. Family feuds and strong notions of personal pride often exacerbated conflicts. The Rajputs weakened each other by constant fighting. This allowed the foreigners (Turks) to embark on victorious campaigns using duplicity and deceit wherever military strength failed against Rajputs.

One of them, Mohammad Ghori defeated Prithviraj Chauhan, the Tomar ruler of Delhi, at the battle of Tarain in 1192 and left the Indian territories in the charge of his deputy, Qutubudin (reign – 1206-1210), who had started life as a slave. This is the reason that the dynasty founded by him is known as the Slave Dynasty. It is he who built the towering Qutub Minar in Delhi. Raziya (reign – 1236-39), the daughter of his successor Iltutmish (reign – 1210-1236), was quite an exception for that age. She sat on the throne of Delhi for a short while. Khiljis, Tughlaqs, Sayyids and Lodis followed in the footsteps of the 'Slaves'. This period is known as the Sultanate. Only a few rulers distinguished themselves in statecraft. Allauddin Khilji (reign – 1296-1316) was not only a distinguished commander but also an able administrator. He is remembered for his military campaign in the south as well as market reforms and price control measures. Muhammad Tughlaq (reign – 1324-1351) was a visionary who had the misfortune of being misunderstood by almost everyone who came in his contact. Modern historians, however, have judged him more sympathetically. Once derided for his whimsical decisions – he once ordered the imperial capital to be shifted to Daulatabad in the Deccan as the site was more central – he is now given credit for his unusual 'vision'. Lodis were, by comparison, quite mild and are only recalled when one is in the vicinity of the majestic Lodi tombs set in beautifully landscaped gardens. The Sultanate introduced, in the sub continent, the Islamic concepts of society and governance, and thus prepared the ground for a scintillating encounter between two important world civilisations.

When the power of the Sultans declined, the outlying provinces once again became important and the process of Hindu Islamic synthesis continued almost without any interruption.

Much before the expulsion of the last Lodi ruler from Delhi by Babur the lustre of the Sultanate had dulled. Babur (reign – 1526-30), the founder of the Mughal Empire in India, was a descendant of Timur as well as Changez Khan. Ousted by his cousins from the small principality in Central Asia that he had inherited, he came to India and defeated Ibrahim, the last Lodi Sultan in 1526 at the First Battle of Panipat. There was a brief interruption to Mughal rule when Babur's son Humayun (reign – 1530-40) was ousted from Delhi, by Sher Shah, an Afghan chieftain.

Sher Shah (reign – 1540-55), assumed power in the imperial capital for a short while. He is remembered as the builder of the Grand Trunk road that spanned the distance from Peshawar to Patna and also one who introduced major reforms in the revenue system, gratefully retained by the Mughals.

It was Babur's grandson Akbar (reign – 1556-1605), who consolidated political power and extended his empire over practically the whole of north India and parts of the south. Akbar realized that if the empire was to attain stability, it must grow roots in the native soil, and that it should seek support from the local ruling groups.

Jahangir (reign – 1605-27) who succeeded Akbar was a pleasure loving man of refined taste. Contemporary chroniclers have recorded that during his reign the Persian nobility related to his wife Nur Jahan had become influential. Shah Jahan (1628-58) his son, ascended the throne next. Shah Jahan's fame rests on the majestic buildings he has left behind – the Taj Mahal, the Red Fort and the Jama Masjid. His successor, Aurangzeb (reign – 1658-1707) was a brave general and an able administrator but his many virtues were eclipsed by religious dogmatism and rigid attitudes. By the end of his rule it was becoming clear that he had overstretched himself and depleted the resources of the empire. The long drawn conflict with the Marathas unfortunately projected Aurangzeb as an enemy of the Hindus.The man continues to be misunderstood. Sharp decline set in after the death of Aurangzeb. His successors were weak and incapable of holding the far-flung empire together. Challengers to the imperial authority emerged in different regions. Provincial governors asserted their independence and soldiers of fortune made a bid for sovereign power. In western India,Shivaji (1637-80) had forged the Marathas into an efficient military machine and given them a sense of national identity.They adopted guerrilla tactics to maul the Mughals and put a severe drain on their economic resources.

The contenders for political supremacy in the 17th and 18th Centuries included besides the Marathas, the Sikhs in Punjab and Hyder Ali (reign – 1721-1782) in Mysore. Tipu Sultan (reign – 1782-99) – Hyder Ali's son and successor allied himself with the French against the British and strove to introduce the latest technical knowledge from Europe.

To perceptive Indians of Tipu's generation it was becoming clear that Medieval Indian society and polity would have to meet the challenge of Europe by casting itself in its mould. Beset by fratricidal feuds and petty bickering India had remained indifferent to the advent of Europeans but, now the time of reckoning could not be delayed.

CULTURE UNDER THE MUGHALS

The Mughals were great patrons of the arts. Many emperors and princes – Akbar and Dara Shikoh (Shah Jahan's son) being the most prominent – were deeply concerned with problems of metaphysics, while some others were writers of considerable talent. Babur penned Babur Nama, a moving memoir wherein he expressed his nostalgia for the land of his birth and documented the Indian scene with great objectivity. Jahangir too has left behind an eminently readable memoir – Tuzuke Jahangiri.

Babur and Humayun did not get enough time to undertake construction of imposing buildings but their successors displayed a great penchant for architecture. Akbar commissioned the building of Fatehpur Sikri where an exquisite blending of elements and motifs from both the Islamic and the Hindu architectural styles is encountered.

Jahangir was a connoisseur of paintings and landscaped gardens. The beautifully landscaped gardens – Shalimar Bagh and Nishat Bagh – in Lahore and in Srinagar – evoke the resplendent floral exuberance of an expensive carpet.

Shah Jahan was a prolific builder. He built the Red Fort and the majestic Jama Masjid in Delhi, though what he is remembered most for is the Taj Mahal – the mausoleum to his beloved wife Mumtaj Mahal who had died during childbirth.

Impressive progress was made in the spheres of music, painting and literature. The Mughal miniatures influenced and spawned schools of art in the princely states of Kota, Bundi and Kishangarh in Rajasthan and in Kangra, Bhaisoli, and Guler in Himachal Pradesh. The themes of these exquisite landscapes and portraits deal with the love of Radha and Krishna, the changing cycle of seasons and the Ragas – modes – of Indian classical music. The Barahmasa and the Ragamalika – series of paintings are the evidence that the native genius in painting had survived the vicissitudes of political history since the days of Ajanta.

Court chroniclers concentrated on the genre of biography, but it was the compositions of the saint poets who laid the foundation of modern Indian literature in vernacular. Poetry that was sensitive to the aspirations of the masses was penned not only in Hindi, but also in Marathi, Gujarati and Tamil. Jayasi, Namdev, Tukaram, Narsi Mehta, Chaitanya Mahaprabhu, Thyagraja are only some of the illustrious names.

Many regional languages, such as Hindi, Urdu, Gujarati, Marathi and Bengali had by the 17th Century, acquired a distinct identity and could boast of a large body of literature. The languages that are spoken today in most parts of India are the ones that evolved and grew to maturity during the Mughal period.

Bahadurshah Zafar – the last of the great Mughals – was a passionate lover of poetry and eminent Urdu poets Ghalib and Zauk graced his court. Mir preceded them by a few decades lamenting the disintegration of a civilized way of life that followed in the wake of the decay of this great empire.

A great churning of ideas during this period gave rise to the Bhakti movement – a powerful social upsurge for reform – spearheaded by poet-saints. The ripples caused by verses sung by wandering minstrels carried the stimulating message across the land and engendered what can only be termed a national resurgence.

Kabir – the sharp-tongued weaver from Varanasi (Benaras) – delighted in exposing the hypocrisy of orthodox Hindus and Muslims alike. He wrote eloquently against idolatry, caste prejudice and articulated abstract metaphysical concepts in witty, memorable poetic phrases that were easy to grasp by the man on the street. The use of folk idiom blending many dialects made him exceptionally accessible for the masses.

Tulsidas retold the story of Rama, the virtuous Prince of Ayodhya, in vernacular as a moral discourse to instill ethical values in private and public life. His narrative poem Ramcharitmanas soon acquired the status of a sacred book and continues to be regarded by many Hindus in the countryside as a most useful encapsulation of traditional wisdom. Another remarkable name is that of Mira – a princess from Rajasthan who walked out of the palace to express her love for the cowherd God Krishna. She asserted the right of a woman to choose her way of life in a strait jacketed feudal society.

Raskhan was a Muslim devotee of Krishna and presents a wonderful illustration of communal harmony that prevailed. Interestingly, quite a few of these poet saints came from humble backgrounds.

MODERN INDIA

Advent of the Europeans

Vasco da Gama landed at Calicut, sailing via the Cape of Good Hope in 1498. This marked the beginning of the European era in Indian history. The lucrative trade in spices of Malabar – in modern Kerala – had tempted the Portuguese and inspired the search for a sea route to the Indies. The Portuguese had already established their colony in Goa by the first decade of the 16th Century but their territorial and commercial hold in India remained rather limited.

In the next century, India was visited by a large number of European travellers – Italians, Englishmen, Frenchmen and Dutchmen. They were drawn to India for different reasons. Some were traders, others adventurers, and quite a few fired by the missionary zeal to find converts to Christianity. Among them was Francois Bernier, the French doctor who enjoyed the confidence of princes and nobles and was in a uniquely privileged position to observe the functioning of the Mughal court. His account is a valuable source of information for historians.

These travelogues aroused European interest in India, and prompted in course of time, the colonial intervention. England, France, the Netherlands and Denmark, floated East India Companies. Chartered as trading companies by their respective governments, their primary commercial interest was in Indian textiles, both silk and cotton, indigo and at times, other sundry merchandise.

During the late 16th and the 17th Centuries, these companies competed with each other fiercely. By the last quarter of the 18th Century the English had vanquished all others and established themselves as the dominant power in India. The military campaigns of Robert Clive and the administrative enterprise of Warren Hastings (1772 - 1785) contributed significantly to this achievement.

British Colonialism

The British administered India for a period of about two centuries and brought about revolutionary changes in the social, political and the economic life of the country. Most Indians who came in their contact could not perceive the strategic threat posed by the East India Company. The British from the beginning followed a policy of divide and rule. Diplomacy and deceit were used to gain control of revenue collection in the province of Bengal. This gave the foreigners effective control of administration. The Marathas, the Sikhs and the rulers of Mysore could never unite to confront the foreign enemy and fell one by one. By the onset of the

19th Century there was no local power that could cope with their onslaught.

Once the British had consolidated their power, commercial exploitation of the natural resources and native labour became ruthless. It is true that there were a few benevolent Governor Generals who initiated social reforms and tried to render the administration more efficient and responsive, but they were exceptions. By the middle of the 19th Century arrogant exploitation of the people had tried the patience of the Indians to the limit.

The British had, to serve their own purpose, set up educational institutions that imparted western education and had established a vast network of rail-roads and telegraph lines. This united the country in an unprecedented manner. The Indians, exposed to western ideas of responsible and representative government, began to yearn for liberty and equality. There were many who looked back to the nation's glorious past and strove to rekindle the sentiment of patriotism. Foremost among them were Raja Ram Mohan Roy, and Ishwar Chandra Vidyasagar. The 19th Century is often referred to as the age of national resurgence in India.

The flash point was reached in 1857 when the British introduced a new rifle and cartridge in the British Indian Army. The bullet offended the religious sentiments of both the Hindus and the Muslims, as it allegedly contained pork and beef tallow. Soldiers at Meerut were the first to rebel and reaching Delhi proclaimed Bahadurshah Zafar the sovereign ruler of India. The revolt soon spread like wild fire all over north India and could only be put down after great difficulty and bloodshed. Nationalist historians have seen in it the first Indian war of independence.

The six decades between the end of the "mutinous" war of 1857 -59 and the conclusion of First World War saw both the peak of British imperial power in India and the birth of nationalist agitation against it.

The Freedom Struggle

With increasing intrusion of aliens in their lives, it was natural that nationalist feelings began to be articulated by an increasing number of Indians. A group of middle class Indians formed the

Indian National Congress (1885) – a society of English educated affluent professionals – to seek reforms from the British. The British did not respond adequately to the legitimate demands of the Indians and this resulted in growing resentment against them.

By the last decade of the 19th Century a younger, more militant generation of Indians had begun to assert their birthright to independence. The Indian National Congress inevitably changed under the constant pressure exerted by men like Bal Gangadhar Tilak from Maharashtra. In Bengal too, there was a fiery group of revolutionaries who maintained that violence was the only language the foreigners understood.

The partition of Bengal announced by Lord Curzon in 1905, triggered a political earthquake – people rose in revolt en masse and forced the withdrawal of the ill advised plan. The mass movement brought out the widespread love for India and things Indian – Swadeshi – and reinforced communal harmony. Foreign produce was boycotted and a bonfire of imported clothes became the characteristic feature of protest.

The anticolonial struggle became truly a mass movement with the arrival of Gandhi in 1915. Mohandas Karamchand Gandhi (1869 - 1948) had suffered great humiliation in South Africa due to the policy of racial discrimination and was commited to rid his motherland of the ills of foreign rule. While practising as an attorney in South Africa, Gandhi had read widely and contemplated deeply. After having acquainted himself with the ground reality in India he devised a unique strategy for India's freedom struggle. Laying equal emphasis on the ends and means, he told his compatriots to accept non-violence as their creed and civil disobedience as their invincible weapon.

Gandhi had a unique gift for dramatic manipulation of symbols as well as a charismatic personality. It was not long, before he galvanised the masses in the fight against the British. Almost all the major leaders in the national movement accepted him as their mentor. He conceived and led the Non-cooperation Movement in 1922, the Salt Satyagraha in 1930 that climaxed in the Dandi March and the Quit India Movement in 1942 with its stirring battle cry – Do or Die – shaking the roots of the British empire.

Even revolutionaries like Bhagat Singh and Chandrashekhar Azad, who disagreed with the philosophy of non-violence, respected him. Netaji Subhash Chadra Bose, who organised the Indian National Army (1943) in South East Asia during the Second World War to liberate India, also sought his blessings before starting his military campaign. Jawaharlal Nehru, Maulana Azad, Jaiprakash Narayan, Vallabhbhai Patel followed Gandhi's commands as disciplined soldiers of the Congress party.

After a long and arduous round of constitutional negotiations and in the face of the determined struggle of the Indian people, the British agreed to transfer power on 15th August, 1947.

But with freedom came the division of the country – a partition that brought in its wake unprecedented death and devastation. Undeterred, millions of Indians continued their endeavour to build the nation.

India since Independence

India at the time of independence was a country beset with great economic problems. It had suffered colonial exploitation for about two centuries and was recovering painfully from the blight of a distressing famine. The disruption of life caused by the Second World War had aggravated the crisis. Large parts of the country were under the feudal rule of Indian princes and only a miniscule minority had taken any initiative to modernize their states. In any case, the benefits of industrialisation remained confined to a small privileged section of the society. With freedom from foreign rule, also came partition and the government was confronted with the awesome task of rehabilitating millions of refugees.

Perhaps the most remarkable achievement of India since independence has been to overcome the trauma of partition and forge a unified modern nation from a bewildering diversity. India today can take pride in its federal form of governance that gives full scope to the development of the country's diverse ethnic and linguistic groups within the overall framework of a united nation.

The process of political integration was completed in two stages after the adoption of a federal constitution on January 26, 1950. First by securing the merger of princely states and then by the redrawing of the boundaries of the states to accommodate the aspirations of major linguistic or ethnic groups. This political transformation synchronised a revolutionary social change with far reaching economic development.

Jawaharlal Nehru, who became the first Prime Minister of India was influenced by socialist thought. Many young leaders also seriously attempted to give the policies of the Indian National Congress – the party in the vanguard of the anti imperialist struggle – a socialist ideological orientation. Mahatma Gandhi too was unequivocal in his championing of the impoverished masses. God for him was no other but the Daridranarayan, poorest of the poor.

The new government gave top priority to economic planning for development. Land reforms were undertaken to ensure greater social justice and eradicate bondage. Steps were taken to accelerate industrialisation and redress regional imbalances. Progress was slow, as the infrastructure was not there. People had very high expectations and the government had to provide for education, health care and employment for hundreds of millions of people. For more than three decades, India's national income grew by no more than 3.6 per cent a year, one of the slowest growth rates in the developing world. Its per capita income was among the lowest.

It took the nation almost half a century to find its feet. Today India is a nuclear power, has launched satellites into space, produces its own steel, and builds its own warships and many of its aircrafts. It has an impressive heavy engineering base, and is one of the few developing countries that is able to bid successfully for heavy engineering turnkey contracts in other developing countries. Its progress in agriculture is equally impressive.

India's most impressive achievement is that the Indian economy today is stable and self-reliant. A powerful entrepreneurial class has emerged – almost as important an objective as securing all-round industrial development.

India's strategy for development has had many critics. It was pointed out that the emphasis on heavy industry made capital inefficient and lowered the annual rate of growth of GNP to about 3.6 per cent between 1950 and 1975.

But the philosophy of self-reliance is finally paying off. By the 80's, the first phase of industrialisation was largely over. India now has a well-developed industrial base that can produce almost anything that the country needs. The scientific and technical infrastructure is capable of responding to complex challenges. With the success of the green revolution that began in 1975, India has also become self-sufficient in food grains.

A self confident nation, India is prepared to interact with the rest of the world without anxiety or inhibition. Just when other countries began to increase protection, the Indian government began to lower protective barriers, invite global tenders for its major investment projects, and encourage industry to secure the most up-to-date technology from abroad.

2

STRUCTURE OF INDIA

Land and the People

India is one of the oldest civilisations with a kaleidoscopic variety and rich cultural heritage. It has achieved multifaceted socio-economic progress during the last 51 years of its Independence. India has become self-sufficient in agricultural production and is now the tenth industrialised country in the world and the sixth nation to have gone into outer space to conquer nature for the benefit of the people. It covers an area of 32,87,2631 sq km, extending from the snow-covered Himalayan heights to the tropical rain forests of the south. As the seventh largest country in the world, India stands apart from the rest of Asia, marked off as it is by mountains and the sea, which give the country a distinct geographical entity. Bounded by the Great Himalayas in the north, it stretches southwards and at the Tropic of Cancer, tapers off into the Indian Ocean between the Bay of Bengal on the east and the Arabian Sea on the west.

Lying entirely in the northern hemisphere, the mainland extends between latitudes 804' and 3706' north, longitudes 6807' and 97025' east and measures about 3,214 km from north to south between the extreme latitudes and about 2,933 km from east to west between the extreme longitudes. It has a land frontier of about 15,200 km. The total length of the coastline of the mainland, Lakshadweep Islands and Andaman and Nicobar Islands, is 7,516.6 km.

Physical Background

Countries having a common border with India are Afghanistan and Pakistan to northwest, China, Bhutan and Nepal to north, Myanmar to the east and Bangladesh to the east of West Bengal. Sri Lanka is separated from India by a narrow channel of sea formed by the Palk Strait and the Gulf of Mannar.

Physical Features

The mainland comprises four regions, namely, the great mountain zone, plains of the Ganga and the Indus, the desert region and the southern Peninsula.

The Himalayas comprise three almost parallel ranges interspersed with large plateaus and valleys, some of which, like the Kashmir and Kullu valleys, are fertile, extensive and of great scenic beauty. Some of the highest peaks in the world are found in these ranges. The high altitudes limit travel only to a few passes, notably the Jelep La and Nathu La on the main Indo-Tibet trade route through the Chumbi Valley, north-east of Darjiling and Shipki La in the Satluj Valley, north-east of Kalpa (Kinnaur). The mountain wall extends ovqr a distance of about 2,400 km with a varying depth of 240 to 320 km. In the east, between India and Myanmar and India and Bangladesh, hill ranges are much lower. Garo, Khasi, jaintia and Naga Hills, running almost east-west, join the chain to Mizo and Rkhine Hills running north-south.

The plains of the Ganga and the Indus, about 2,400 km long and 240 to 320 km broad, are formed by basins of three distinct river systems – the Indus, the Ganga and the Brahmaputra. They are one of the world's greatest stretches of flat alluvium and also one of the most densely populated areas on the earth. Between the Yamuna at Delhi and the Bay of Bengal, nearly 1600 km away, there is a drop of only 200 metres in elevation.

The desert region can be divide into two parts – the great desert and the little desert. The great desert extends from the edge of the

Rann of Kachch beyond the Luni river northward. The whole of the Rajasthan-Sind frontier runs through this. The little desert extends from the Luni between Jaisalmer and Jodhpur up to the northern wastes. Between the great and the little deserts lies a zone of absolutely sterile country, consisting of rocky land cut up by limestone ridges.

The Peninsular Plateau is marked off from the plains of the Ganga and the Indus by a mass of mountain and hill ranges varying fiom 460 to 1,220 metres in height. Prominent among these are the Aravalli, Vindhya, Satpura, Maikala and Ajanta. The Peninsula is flanked on the one side by the Eastern Ghats where average elevation is about 610 metres and on the other by the Western Ghats where it is generally from 915 to 1,220 metres, rising in places to over 2,440 metres. Between the Western Ghats and the Arabian Sea lies a narrow coastal strip, while between Eastern Ghats and the Bay of Bengal there is a broader coastal area. The southern point of plateau is formed by the Nilgiri Hills where the Eastern and the Western Ghats meet. The Cardamom Hills lying beyond may be regarded as a continuation of the Western Ghats.

GEOLOGICAL STRUCTURE

The geological regions broadly follow the physical features and may be grouped into three regions: the Himalayas and their associated group of mountains, the Indo-Ganga Plain and the Peninsular Shield.

The Himalayan mountain belt to the north and the Naga-Lushai mountain in the east, are the regions of mountain-building movement. Most of this area, now presenting some of the most magnificent mountain scenery in the world, was under marine conditions about 60 crore years ago. In a series of mountain building movements commencing about seven crore years ago, the sediments and the basement rocks rose to great heights. The weathering and erosive agencies worked on these to produce the relief seen today. The Indo-Ganga plains are a great alluvial tract that separates the Himalayas in the north from the Peninsula in the south.

The Peninsula is a region of relative stability and rare seismic disturbances. Highly metamorphosed rocks of the earliest periods, dating back as far as 380 crore years, occur in the area; the rest being covered by the coastal-bearing Gondwana formations, lava flows belonging to the Deccan Trap formation and younger sediments.

Rivers

Rivers in India may be classified as: (i) Himalayan rivers, (ii) Peninsular rivers, (iii) Coastal rivers and (iv) rivers of the inland drainage basin.

The Himalayan rivers are perennial as they are generally snow-fed and have reasonable flow throughout the year. During the monsoon the Himalayas receive very heavy rainfall and the rivers discharge the maximum quantity of water causing frequent floods. The Peninsular rivers are generally rain-fed and, therefore, fluctuate in volume. A large number of the streams is non-perennial. The coastal streams, especially on the west coast, are short in length and have limited catchment areas. Most of them are flashy and non-perennial. The streams of the inland drainage basin of western Rajasthan are few and far between. Most of them are of an ephemeral character. They drain towards the individual basins or salt lakes like the Sambhar or are lost in the sands having no outlet to the sea. The Luni is the only river of this category that drains into the Rann of Kachch.

The Ganga sub-basin which is a part of the larger Ganga-Brahmaputra-Meghana basin is the largest in India receiving waters from an area which comprises about one-quarter of the total area of the country. Its boundaries are well-defined by the Himalayas in the north and the Vindhyas in the south. The Ganga flows through Uttar Pradesh, Bihar and West Bengal in India and enters Bangladesh thereafier. It has two main headwaters in the Himalayas: the Bhagirathi and the Alaknanda, the former rising from the Gangotri glacier at Gomukh and the latter from a glacier short of the Alkapuri glacier. The Ganga is joined by a number of the Himalayan rivers including the Yamuna, Ghagra, Gomti, Gandak and Kosi. The western-most river of the Ganga system is the Yamuna which rises from the Yamunotri glacier and joins the Ganga at Allahabad. Among important rivers flowing north from central India into the Yamuna / Ganga are the Chambal, Betwa and Sone.

The Brahmaputra and the Barak flowing from east to west in north-eastern region are international rivers and have immense water resources potential which is still in the initial stages of development.

The Godavari in the southern Peninsula has the second largest river basin covering 10 per cent of the area of India. Next to it is the Krishna basin in the region, while the Mahanadi has the third largest basin. The basin of the Narmada in the uplands of the Deccan flowing to the Arabian Sea and of the Kaveri in the south falling into the Bay of Bengal are about the same size, though with different character and shape.

Two other river systems, which are small but agriculturally important, are those of the Tapti in the north and the Pennar in the south. These west coast rivers are of great importance as they contain as much as 11 per cent of the country's water resources while draining about 10 per cent of the land area.

Climate

The climate of India may be broadly described as tropical monsoon type. There are four seasons: (i) winter (January-February), (ii) hot weather summer (March-May), (iii) rainy south-western monsoon (June-September) and (iv) post-monsoon, also known as north-east monsoon in the southern Peninsula (October-December). India's climate is affected by two seasonal winds – the north-east monsoon and the south-west monsoon. The north-east monsoon commonly known as winter monsoon blows from land to sea whereas south-west monsoon known as summer monsoon blows from sea to land after crossing the Indian Ocean, the Arabian Sea and the Bay of Bengal. The south-west monsoon brings most of the rainfall during the year in the country. It is now possible to make forecast about the monsoon rains successfully with developed models and trained manpower.

Flora

With a wide range of climatic conditions from the torrid to the arctic, India has a rich and varied vegetation, which only a few countries of comparable size possess. India can be divided into eight distinct floristic regions, namely, the western Himalayas, the eastern Himalayas, Assam, the Indus plain, the Ganga plain, the Deccan, Malabar and the Andamans.

The Westem Himalayan region extends from Kashmir to Kumaon. Its temperate zone is rich in forests of chir, pine, other conifers and broad-leaved temperate trees. Higher up, forests of deodar, blue pine, spruce and silver fir occur. The alpine zone extends from the upper limit of the temperate zone of about 4,750 metres higher.

The characteristic trees of this zone are high-level silver fir silver birch and junipers. The eastern Himalayan region extends from Sikkim eastwards and embraces Darjiling, Kurseong and the adjacent tract. The temperate zone has forests of oaks, laurels, maples, rhododendrons, alder and birch. Many conifers, junipers and dwarf willows also occur here. The Assam region comprises the Brahmaputra and the Surma valleys with evergreen forests, occasional thick clumps of bamboos and tall grasses. The Indus plain region comprises the plains of Punjab, western Rajasthan and northern Gujarat. It is dry and hot anct supports natural vegetation. The Ganga plain region covers the area which is alluvial plain and is under cultivation for wheat, sugarcane and rice. Only small areas support forests of widely differing types. The Deccan region comprises the entire table land of the Indian Peninsula and supports vegetation of various kinds from scrub jungles to mixed deciduous forests. The Malabar region covers the excessively humid beit of mountain country parallel to the west coast of the Peninsula. Besides being rich in forest vegetation, this region produces important commercial crops, such as coconut, betelnut, pepper, coffee and tea, rubber and cashewnut. The Andaman region abounds in evergreen, mangrove, beach and diluvial forests. The Himalayan region extending from Kashmir to Arunachal Pradesh through Nepal, Sikkim, Bhutan, Meghalaya and Nagaland and the Deccan Peninsula is rich in endemic flora, with a large number of plants which are not found elsewhere.

India is rich in flora. Currently available data place India on the tenth position in the world and fourth in Asia in plant diversity. From about 70 per cent geographical area surveyed so far, 49,000 species of plants have been described by the Botanical Survey of

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India. The vascular flora, which forms the conspicuous vegetation cover comprises 15,000 species. Of these, more than 35 per cent is endemic and has so far not been reported anywhere in the world. The total plant wealth of the country includes not only the useful large flowered plants including flowering shrubs, but also a large number of non-flowering plants like ferns, liverworts, algae and fungi.

The flora of the country is being studied by the Botanical Survey of India (BSI), Calcutta along with certain unversities and research institutions. The publication Nora of India in the form of fascicles has been initiated by BSI and 20 fascicles have already been published. BSI also brings out publications on the state and district flora, both flowering and non-flowering, from time to time.

Ethnobotanical study deals with the utilisation of plants and plant products by ethnic races. A scientific study of such plants has been made by BSI. A number of detailed ethobotanical explorations have been conducted in different tribal areas of the country. More than 800 plant species of ethnobotanical interest have been collected and identified at different centres.

Owing to destruction of forests for agricultural, industrial and urban development, several Indian plants are facing extinction. About 1,336 plant species are considered vulnerable and endangered. About 20 species of higher plants are categorised as possibly extinct as these have not been sighted during the last 6-10 decades. BSI brings out an inventory of endangered plants in the form of a publication titled Red Data Book. Four volumes of the book have already been published and the fifth is being compiled. Samples of some of these plants are preserved in botanical gardens and national parks. Collections of dried samples of these plants are preserved in the Central National Herbarium, the regional herbaria of BSI and in research and training institutions of the country.

Fauna

The Zoological Survey of India (ZSI), with its headquarters in Calcutta and 16 regional stations located in different parts of the country, is responsible for surveying the faunal resource of our country. Possessing a tremendous diversity of climate and physical conditions, India has great variety of fauna numbering 81,251

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species. Of these,insects constitute about 60,000, molluscs a little over 5,000, mammals 372, birds 1,228, reptiles 446, amphibians 204, and fishes 2,546.

The mammals include the majestic elephant, the gaur of Indian bison the largest of existing bovines, the great Indian rhinoceros, the gigantic wild sheep of the Himalayas, the swamp deer, the thamin spotted deer, nilgai, the four-horned antelope, the Indian antelope or black-buck – the only representatives of these genera. Among the cats, the tiger and lion are the most magnificent of all; other splendid creatures such as the clouded leopard, the snow leopard, the marbled cat, etc., are also found. Many other species of mammals are remarkable for their beauty, colouring, grace and uniqueness. The abundant and colourful, life of this country is one of its treasures. Several birds, like pheasants, geese, ducks, mynahs, parakeets, pigeons, cranes, hornbills and sunbirds, inhabit forests and wet lands.

Rivers and lakes harbour crocodiles and gharials, the latter being the only representative of crocodilian order in the world. The salt water crocodile is found along the eastern coast and in the Andaman and Nicobar Islands. A project for breeding crocodiles started in 1974, has been instrumental in saving the crocodile from extinction. Twelve schemes are in operation in different states for breeding crocodiles.

The great Himalayan range has a very interesting variety of fauna that includes the wild sheep and goats, markhor, ibex, shrew and tapir. The panda and the snow leopard are found in the upper reaches of the mountains.

Depletion of vegetative cover due to expansion of agriculture, habitat destruction, over-exploitation, pollution, introduction of toxic imbalance in community structure, epidemics, floods, droughts and cyclones, contribute to the loss of flora and fauna. More that 77 species of mammals, 72 species of birds, 17 species of reptiles, three species of amphibians, two species of fish and a large number of butterflies, moth and beetles are considered vulnerable and endangered.

There are presently national parks and 447 wildlife sanctuaries covering about 1.50 lakhs sq km area which is nearly 4.5 per cent of the total geographical area of the country.

DEMOGRAPHIC BACKGROUND CENSUS

Enumeration for the 1991 census began from 9 February and ended on 28 February with the census reference point of time being the sunrise of 1 March, 1991. The houseless people were enumerated on the night of 28 February and in some cases on 27 February due to Holi Festival. A revisional round was conducted during 1-5 March 1991 to up-date the population as on 1 March, 1991. In certain inaccessible and snow bound areas of Uttar Pradesh, Himachal Pradesh, Arunachal Pradesh and Andaman and Nicobar Islands, census was, however, conducted non-synchronously. Due to unfavourable weather conditions prevailing in lammu and Kashrhir during February-March, 1991; it was plaruted to conduct the 1991 census in that State in August-October, 1991; but this could not take place due to disturbed conditions prevailing there at the proposed time of census.

Population

India's population, as on 1 March, 1991 stood at 846.30 million (439.23 million males and 407.07 million females). This includes the projected population of 7.72 nlillion of Jammu and Kashmir. The second largest populous country, India is the home of 16 per cent of world's population. The country, however, accounts for 2.42 per cent of the total world area.

The population of India as recorded at each decenial census hom 1901 has grown steadily except for a decrease during 1911-21. In most states the growth rate declined during the decade. However, Andhra Pradesh, Arunachal Pradesh, Madhya Pradesh, Maharashtra, Nagaland, Tripura, west Bengal, Daman and Diu, Lakshadweep and Pondicherry which account for one-third of the country's population, recorded increase in growth rate. Nagaland registered the highest growth rate of 56.08 per cent while Kerala the lowest 14.32 per cent.

Mumbai metropolis continued to be the most populated city of the country with urban population of 12.60 million, Calcutta taking the second place having 11.02 million. Delhi ranks third with a population (urban) of 8.42 million followed by Chennai 5.42 million.

Population Density

One of the important indices of population concentration is the density of population. It is defined as the number of persons per square kilometre. The population density has gone up from 216 in 1981 to 267 persons in 1991 (excluding Assam and J&K). In 1901 it was 77 persons.

The 10 heavily populated districts of the country are Calcutta, Chennai, Greater Mumbai, Hyderabad, Delhi, Chandigarh, Mahe, Howrah, Kanpur City and Bangalore. All of them have density of above 2,000 persons per square kilometre and 5.01 per cent of the country's population lives in these districts. The average density of these districts is 6,888.

Sex Ratio

Sex ratio is defined as the number of females per thousand males. In India, it has generally been adverse to women. The ratio has also declined over the years except in 1981 when it slightly improved to 934 from 927. In 1991, there has been a fall by seven points to 927 per thousand males. But Kerala represented a different spectrum. The State has a higher number of females than males, 1,036 females against thousand males.

In the Indian context, a sex ratio of 950 and above can be considered as favourable to females. The states and union territories coming under this category besides Kerala are Himachal Pradesh (976), Andhra Pradesh (972), Goa (967), Karnataka (960), Manipur (958), Orissa (971), Tamil Nadu (974), Dadra and Nagar Haveli (952), Daman and Diu (969) and Pondicherry (979). Chandigarh accounted for the lowest number of females per thousand males with 790.

Literacy

For the purpose of census, a person is deemed as literate if he or she can tead and write any language with understanding. In the 1991 census, the question on literacy was canvassed only for population aged seven years and above, unlike earlier censuses which took into account population of five years and above for this purpose.

The final results reveal that there has been an increase in literacy in the country. The literacy rate in the country (excluding Jammu and Kashmir) is 52.21 per cent (64.13 for males and 39.29 for females).

Rajasthan being close to it having 38.55 literacy percentage. But literacy among the women was the lowest in Rajasthan with a percentage of 20.44 as compared to 54.99 among the males.

Table 2.1: Population 1901-91

Year	*Population Rate*	*Exponential*	*Decade Average Progressive growth Annual growth rate over 1901*	*Growth Rate*
1901	23,83,96,327	–	–	–
1911	25,20,93,390	+5.75	0.56	+5.75
1921	25,13,21,213	-0.31	-0.03	+5.42
1931	27,89,77,238	+11.00	1.04	+17.02
1941	31,86,60,580	+14.22	1.33	+33.67
1951	36,10,88,090	+13.31	1.25	+51.47
1961	43,92,34,771	+21.51	1.96	+84.25
1971	54,81,09,652	+24.80	2.20	+129.94
1981	68,33,29,097	+24.66	2.22	+186.64
1991	84,63,02,688	+23.85	2.14	+255.00

Notes:

1. In 1981, census was not conducted in Assam. Based on the 1971 census and the final results of the 1991 census the population of Assam as on 1 March, 1981 has been interpolated.
2. The 1991 census has not yet been conducted in Jammu and Kashmir. The population figures for India include the population figure for lammu and Kashmir projected by the Standing Committee of Experts on Population Projections (October, 1989).
3. The 1971 census was conducted with 1 April, 1971 as the reference date. In both the 1961 and 1981 censuses the reference date was 1 March. The average annual exponential growth rate presented in the statement takes into account this difference. No such adjustment has been made while calculating decadal growth rate.
4. In Arunachal Pradesh the census was conducted for the first time in 1961. While working out the decadal growth, both absolute as well as per cent for 1951-61, 1961 census population of Arunachal Pradesh has been excluded.

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NATION PRIDE

NATIONAL SYMBOLS

National Flag

The National flag is a horizontal tricolour of deep saffron (kesari) at the top, white in the middle and dark green at the bottom in equal proportion. The ratio of width of the flag to its length is two to three. In the centre of the white band is a navy blue wheel, which represents the charkha. Its design is that of the wheel which appears on the abacus of the Sarnath Lion Capital of Ashoka. Its diameter approximates to the width of the white band and it has 24 spokes.

The design of the national flag was adopted by the Constituent Assembly of India on 22 July 1947. Its use and display are regulated by the Indian Flag Code.

State Emblem

The state emblem is an adaptation from the Sarnath Lion Capital of Ashoka. In the original, there are four lions, standing back to back, mounted on an abacus with a frieze carrying sculptures in high relief of an elephant, a galloping horse, a bull and a lion separated by intervening wheels over a bell-shaped lotus. Carved out of a single block of polished sandstone, the capital is crowned by the Wheel of the Law (Dharma Chakra).

In the State emblem, adopted by the Government of India on 26 January, 1950, only three lions are visible, the fourth being hidden from view. The wheel appears in relief in the centre of the abacus with a bull on right and a horse on left and the outlines of other wheels on extreme right and left. The bell-shaped lotus has been omitted. The words Satyameva Jayate from Mundaka Upanishad, meaning 'Truth Alone Triumphs', are inscribed below the abacus in Devanagari script.

National Anthem

The song Jana-gana-mana, composed originally in Bengali by Rabindranath Tagore, was adopted in its Hindi version by the Constituent Assembly as the national anthem of India on 24 January, 1950. It was first sung on 27 December, 1911 at the Calcutta Session of the Indian National Congress. The complete song consists of five stanzas. The first stanza contains the full version of the National Anthem :

Jana-gana-mana-adhinayaka, jaya he
Bharata-bhagya-vidhata.
Punjab-Sindh-Gujarat-Maratha
Dravida-Utkala-Banga
Vindhya-Himachala-Yamuna-Ganga
Uchchhala-Jaladhi-taranga.
Taba shubha name jage,
Taba shubha ashisha mange,
Gaye taba jaya gatha,
Jana-gana-mangala-dayaka jaya he
Bharata-bhagya-vidhata.
Jaya he, jaya he, jaya he,
Jaya jaya jaya, jaya he!

Playing time of the full version of the national anthem is approximately 52 seconds. A short version consisting of first and last lines of the stanza (playing time approximately 20 seconds) is also played on certain occasions. The following is Tagore's English rendering of the anthem :

Thou art the ruler of the minds of all people,
dispenser of India's destiny.

Thy name rouses the hearts of punjab, Sindh,
Gujarat and Maratha,

Of the Dravida and Orissa and Bengal;

It echoes in the hills of the Vindyas and Himalayas,
mingles in the music of Jamuna and Ganges and is
chanted by the waves of the Indian Sea.

They pray for thy blessings and sing thy praise.

The saving of all people waits in thy hand,
thou dispenser of India's destiny.

Victory, victory, victory to thee.

National Song

The song Vande Mataram, composed in Sanskrit by Bankimchandra Chatterji, was a source of inspiration to thi people in their struggle for freedom. It has an equal status with Jana-gana-mana. The first political occasion when it was sung was the 1896 session of the Indian National Congress. The following is the text of its first stanza :

Vande Mataram! Vande Mataram!

Sujalam, suphalam, malayaj shitalam,
Shasya shyamalam, Mataram!

Vande Mataram! Vande Mataram!

Shubhra jyothsna pulakita yaminim,
Phulla kusumita drumadala shobhinim,
Suhasinim sumadhura bhashinim,
Sukhadam varadam, Mataram!

Vande Mataram! Vande Mataram!

The English translation of the stanza rendered by Sri Aurobindo in prose' is :

I bow to thee, Mother,
richly-watered, richiy-fruited,
cool with the winds of the south,

dark with the crops of the harvests,
The Mother!
Her nights rejoicing in the glory of the moonlight,
her lands clothed beautifully with her trees in
flowering bloom,
sweet of laughter, sweet of speech,

The Mother, giver of boons, giver of bliss.

I bow to thee, Mother,

National Calendar

The national calendar based on the Saka Era with Chaitra as its first month and a normal year of 365 days was adopted from 22 March, 1957 along with the Gregorian calendar for the following official purposes: (i) Gazette of India, (ii) news broadcast by All India Radio, (iii) calendars issued by the Govemment of India and (iv) Government communications addressed to the members of the public.

Dates of the national calendar have a permanent correspondence with dates of the Gregorian calendar : 1 Chaitra falling on 22 March normally and on 21 March in leap year.

National Animal

The magnificent tiger, Panthera tiger (Linnaeus), is a striped animal. It has a thick yellow coat of fur with dark stripes. The combination of grace, strength, agility and enormous power has earned the tiger its pride of place as the national animal of India. Out of eight races of the species known, the Indian race, the floyal Bengal Tiger, is found throughout the country except in the north-western region and also in the neighbouring countries, Nepal, Bhutan and Bangladesh. To check the dwindling population of tigers in India 'Project Tiger' was launched in April 1973. So far, 23 tiger reserves have been established in the country under this project, covering an area of 33,126 sq km.

National Bird

The Indian peacock, Pavo cristatus (Linnaeus), the national bird of India, is a colourful, swan-sized bird, with a fan-shaped crest of feathers, a white patch under the eye and a long, slender neck. The male of the species is more colourful than the female, with a glistening blue breast and neck and a spectacular bronze-green train of around 200 elongated feathers. The female is brownish, slightly smaller than the male, and lacks the train. The elaborate courtship dance of the male, fanning out the tail and preening its feathers is a gorgeous sight.

The peacock is widely found in the Indian sub-continent from the south and east of the Indus river, Jammu and Kashmir, east Assam, south Mizoram and the whole of the Indian peninsula. The peacock enjoys protection from the people as it is never molested for religious and sentimental reasons. It is fully protected under the Indian Wildlife (Protection) Act, 1972.

4

LAW AND ORDER

Judiciary

One of the unique features of the Indian Constitution is that notwithstanding the adoption of a federal system and existence of Central Acts and State Acts in their respective spheres, it has generally provided for a single integrated system of courts to administer both Union and state laws. At the apex of the entire judicial system exists Supreme Court of India with a High Court of each state or group of states, and under High Courts, there is a hierarchy of subordinate courts. There is generally separation of judiciary from executive. Panchayat courts also function in some states under various names like Nyaya Panchayat, Panchayat Adalat, Gram Kachheri, etc., to decide Civil and criminal disputes of petty and local nature. Different state laws provide for different kinds of jurisdiction of courts.

Each state is divided into judicial districts presided over by a district and sessions judge, who is the principal civil court of original jurisdiction and can try all offences including those punishable with death. He is the highest judicial authority in a district. Below him, there are courts of civil jurisdiction, known in different states as munsifs, sub-judges, civil judges and the like. Similarly, criminal judiciary comprises chief judicial magistrate and judicial magistrates of first and second class.

Supreme Court

The Supreme Court of India consists of 25 judges (excluding the Chief Justice of India). The judges hold office until they attain the age of 65 years. The Supreme Court of India has original jurisdiction in any dispute arising: (a) between the Government of India and one or more states; or (b) between the Government of India and any state or states on the one side and one or more states on the other; or (c) between two or more states.

An appeal shall lie to the Supreme Court from any judgement, decree or final order of a High Court in the territory of India, whether in a civil, criminal or other proceeding.

As on 9 May, 1998, the Members of the Court are: Chief Justice M.M. Punchhi; Judges: S.C. Agrawal, A.S. Anand, S.P. Bharucha, M.K. Mukherjee, S.B. Majumdar, Sujata V. Manohar, G.T. Nanavati, S. Saghir Ahmad, K. Venkataswami, B.N. Kirpal, G.B. Pattanaik, S.P. Kurdukar, K.T. Thomas, M. Jagannadha Rao, V.N. Khare, D.P. Wadhwa, M. Srinivasan, S. Rajendra Babu, A.P. Misra and S.S.M. Quadri.

High Court

High Court stands at the head of the state's judicial administration. There are 18 High Courts in the country, three having jurisdiction over more than one state. Among the Union Territories, Delhi alone has a High Court of its own. Other six Union Territories come under jurisdiction of different state High Courts. Each High Court comprises a Chief Justice and such other judges as the President may, from time to time, appoint. The Chief Justice of High Court is appointed by the President in consultation with the Chief Justice of India and the Governor of the state. The procedure for appointing puisne judges is the same except that the Chief Justice of the High Court concerned is also consulted. They hold office up to 62 years of age and are removable in the same manner as a judge of the Supreme Court. To be eligible for appointment as a judge, one must be a citizen of India and have held a judicial office in India for

10 years or must have practised as an advocate of a High Court or two or more such courts in succession for a similar period.

Each High Court has power to issue to any person or authority and government within its jurisdiction, direction, orders or writs including writs which are in the nature of habeas corpus, mandamus, prohibition, quo warranto and certiorari for enforcement of Fundamental Rights and for any other purpose. This power may also be exercised by any High Court exercising jurisdiction in relation to territories within which the cause of action, wholly or in part, arises for exercise of such power, even if the seat of such Government or authority or residence of such person is not within those territories. The total sanctioned strength of judges and additional judges in different High Courts is 587 against which 462 were in position as on 1 August 1998.

Each High Court has powers of superintendence over all courts within its jurisdiction. It can call for returns from such courts, make and issue general rules and prescribe forms to regulate their practices and proceedings and determine the manner and form in which book entries and accounts shall be kept.

Subordinate Courts

The structure and functions of subordinate courts are more or less uniform throughout the country. Designations of courts connote their functions. These courts deal with all disputes of civil or criminal nature as per the powers conferred on them. They have been derived principally from two important codes prescribing procedures, the Code of Civil Procedure, 1908 and the Code of Criminal Procedure, 1973 and further strengthened by local statutes.

As per direction of Supreme Court in WP (Civil), 1022/1989 in the All India Judges Association case, a uniform designation has been brought about in the subordinate judiciary's judicial officers all over the country, viz., District or Additional District Judges, Civil Judge (Senior Division) and Civil Judge Junior Division) on the civil side and on criminal side, Sessions Judge, Additional Sessions Judge, Chief Judicial Magistrate and Judicial Magistrate, etc., as laid down in the Cr PC. Appropriate adjustment, if any, has been made of existing posts by indicating their equivalent with any of these categories by all state governments/UT administrations.

Under Article 235 of the Constitution of India, the administrative control over the members of subordinate judicial service vests with the concerned High Court. Further in exercise of powers conferred under proviso to Article 309 read with Article 233 and 234 of the Constitution, the state Government shall frame rules and regulations in consultation with the High Court exercising jurisdiction in relation to such state. The members of the State Judicial Services are governed by these rules and regulations. However, in pursuance of the Supreme Court's directive in the referred case, for the first time, the Central Government have set up a National Judicial Pay Commission to examine the present structure of emoluments and conditions of service of judicial officers in the states and UTs. The Commission will make its recommendations to the state governments.

The next set of courts is described as courts of district and sessions judge which also include courts of additional judge, joint judge or assistant judge. The court of the district and sessions judge at district level is the principal court of original jurisdiction. It is presided over by an officer called district and sessions judge. As a rule, the same officer invested with power under both the statutes presides over the court and it is known as district and sessions court. Depending upon workload, a district court may have jurisdiction over more than one district. In some states, there is a court called court of civil and sessions judge. These courts generally have unlimited pecuniary jurisdiction and depending upon the power conferred on the incumbent officer-in-charge of the court, it can handle criminal cases. In some states, these courts with unlimited pecuniary jurisdiction are called courts of civil judge (senior division) while in other states they are described as courts of subordinate judge.

In addition, there are courts known as small causes courts. These are set up either under the Provisional Small Causes Act at the district level or under the Presidency Town Small Causes Court Act in presidency/metropolitan towns.

Family Courts

The Family Courts Act, 1984 aims at promoting conciliation in and securing speedy settlement of disputes relating to marriage and family affairs and related matters. It envisages that courts shall be set up in a city or town with a population of more than 10 lakh and at such other places as the state government may deem necessary. Family courts have been set up in Andhra Pradesh-seven, Assam-one, Bihar-two, Karnataka-five, Kerala-five, Maharashtra-sixteen, Manipur-one, Orissa-two, Pondicherry-one, Punjab-two, Rajasthan-five, Sikkim-one, Tamil Nadu-six, Uttar Pradesh-sixteen and West Bengal-one. Besides, necessary notifications extending the jurisdiction of the Family Courts Act have also been issued by the Government of India in respect of Haryana, Madhya Pradesh and the Union Territory of Andaman and Nicobar Islands.

National Judicial Academy

The National Judicial Academy has been set up by the Government of India to provide in-service training to judicial officers. The Academy was registered on 17 August, 1993 under the Societies Registration Act, 1860. The Academy located in Bhopal has its registered office in New Delhi. It will provide training to judicial officers of states/UTs as well as ministerial officers working in the Supreme Court of India and the High Courts. The Academy will also function as a centre of excellence in the State.

Legal Aid

Article 39A of the Constitution provides for free legal aid to the poor and weaker sections of society. The Legal Services Authorities Act, 1987 (as amended by the Act of 1994) which came into force on 9 November, 1995, aims at establishing a nation-wide network for providing free and comprehensive legal services to the weaker sections. National Legal Services Authority (NALSA) has been set up for implementing and monitoring legal aid programmes in the country. The Supreme Court Legal Services Committee has been constituted under the Act. In every High Court also, the High Court Legal Services Committees are being established to provide free legal aid to the eligible persons in legal matters coming before the High Courts. The Legal Services Authorities Act also provides for constitution of the State Legal Services Committees, High Court Legal Services Committees, District Legal Services Committees and Taluk Legal Services Committees.

Under the Legal Services Authorities Act, every citizen whose annual income does not exceed Rs 9,000 is eligible for free legal aid in cases before subordinate courts and high courts. In cases before the Supreme Court, the limit is Rs 12,000. This limit can be increased by the state governments. Limitation as to the income does not apply in the case of persons belonging to the scheduled castes, scheduled tribes, women, children, handicapped, etc. The legal aid programme adopted by NALSA include promoting of legal literacy, setting up of legal aid clinics in universities and law colleges, training of para-legals, and holding of legal aid camps and Lok Adalats.

The Government has sanctioned Rs 4 crore as grant-in-aid for NALSA for 1998-99 for allocating funds to the State, District authorities, etc. The NALSA is also monitoring and evaluating the implementation of the legal aid programmes in the country. Up to December 1997 about 23.88 lakh persons were benefited through court-oriented legal aid programmes provided by the State Legal Aid and Advice Boards/ State Legal Services Authorities. Of them, 3.73 lakh persons belonged to the scheduled castes, about 2.14 lakh to the scheduled tribes, 2,40,485 were women and 8,578 were children.

Lok Adalats have proved to be an effective mechanism for resolution of disputes through conciliatory methods. Up to 31 December 1997, about 17,633 Lok Adalats have been held in different parts of the country where about 68.86 lakh cases were settled.In about 3,49,710 motor vehicles accident claims cases, compensation amounting to over Rs 1,160.07 crore was awarded. Under the Legal Services Authorities Act, Lok Adalat has been given the status of a Civil Court and every award made by Lok Adalat is final and binding on all parties and no appeal lies to any court against its award.

Attorney-General

The Attorney General for India is appointed by the President and holds office during the pleasure of the President. He must be a person qualified to be appointed as a Judge of the Supreme Court. It is the duty of the Attorney-General of India to give advice to the Government of India upon such legal matters, and to perform such other duties of a legal character, as may be referred or assigned to him by the President, and to discharge the functions conferred on him by or under the Constitution or any other law. In the performance of his duties, he has the right of audience in all courts in India as well as the right to take part in the proceedings of Parliament, without the right to vote. In the discharge of his functions, the Attorney-General is assisted by Solicitor-General and Additional Solicitor-General.

Legal Profession

In India, the law relating to legal profession is governed by the Advocates Act, 1961 and the rules framed thereunder by the Bar Council of India. It is a self-contained code of law relating to legal practitioners and provides for the constitution of State Bar Councils and Bar Council of India. A person enrolled as an advocate under the Advocates Act, 1961, is entitled to practise law throughout the country. An advocate on the roll of a State Bar Council may apply for transfer to the roll of any other State Bar Council in the prescribed manner. No person can be enrolled an advocate on the roll of more than one State Bar Council.

There are two classes of advocates, namely, senior advocates and other advocates. An advocate with his consent, may be designated as a senior advocate, if the Supreme Court or a High Court is of the opinion that by virtue of his ability, standing at the Bar or special knowledge or experience in law, he deserves such distinction. A senior advocate cannot appear without an advocate-on-record in the Supreme Court or without some other advocate in the state roll in any other court or tribunal. Standards of education have been prescribed for enrolement as an advocate. There are also rules regulating standards of professional conduct and etiquette and other matters. State Bar Councils have disciplinary jurisdiction over advocates whose names appear on their rolls. This is subject to right of appeal to the Bar Council of India and a further right of appeal to the Supreme Court of India.

Law Commission of India

The 15th Law Commission has been reconstituted with effect from 1 September, 1997 for a period of three years with Hon'ble Justice B.P. Jeevan Reddy as Chairman and Mrs Justice Leila Seth and Dr. N.M Ghatate as Members, Dr. N. R. Madhava Menon as part-time member and Dr. S.C. Jain as Member-secretary. The terms of reference of the Law Commission are: (i) Review/Repeal of obsolete laws: (a) to identify laws which are no longer needed or relevant and can be immediately repealed; (b) to identify laws which are in harmony with the existing climate of economic liberalization which need no change; (c) to identify laws which require changes or amendments and to make suggestions for their amendment; (d) to consider in a wider perspective the suggestions for revision/amendment given by expert groups in various ministries/departments with a view to coordinating and harmonising them; (e) to consider references made to it by ministries/departments in respect of legislation having bearing on the working of more than one ministry/department; to suggest suitable measures for quick redressal of citizens, grievances in the field of law; (ii) Law and Poverty: (a) to examine the laws which affect the poor and carry out post-audit for socio-economic legislation; o) to take all such measures as may be necessary to harness law and the legal process in the service of the poor; (iii) to keep under review the system of judicial administration to ensure that it is responsive to the reasonable demands of the times and in particular to secure: (a) elimination of delays, speedy clearance of arrears and reduction of costs so as to secure quick and economical disposal of cases without affecting the cardinal principle that decisions should be just and fair; (b) simplification of procedure to reduce and eliminate technicalities and devices for delay so that it operates not as an end in itself but as a means of achieving justice; (c) improvement of standards of all concerned with the administration of justice; (iv) to examine the existing laws in the light of Directive Principles of State Policy and to suggest ways of improvement and reform and also to suggest such legislation as might be necessary to implement the Directive Principles and to attain the objectives set out in the Preamble to the Constitution; (v) to revise the Central Acts of general importance so as to simplify them and to remove anomalies, ambiguities and inequities; (vi) to recommend to the Government measures for making the statute book up-to-date by repealing obsolete laws and enactments or parts thereof which have outlived their utility; and (vii) to consider and to convey to the Government its views on any other subject relating to law and judicial administration that may be referred to it. The Commission has taken up various subjects according to the terms of reference. Questionnaires on the proposed amendments to the Code of Civil Procedure, 1908 and Hire Purchase Act, 1972 have been issued to elicit the views/suggestions on the aforesaid subjects from the various concerned persons/ organisations including government agencies. The Commission has submitted the following reports: (a) 157th report on 'Section 52: Transfer of Property Act, 1882 and its amendment'; (b) 158th report on 'The Amendment of the Industries (Development and Regulation) Act, 1951'; (c) 159th report on 'Repeal and Amendment of Laws: Part-I'; (d) 160th report on 'Amendment to the All India Council for Technical Education Act, 1987 (Act 52 of 1987)'; (e) 161st report on 'Central Vigilance Commission and Allied Bodies'; and (f) 162nd report on 'Review of Functioning of Central Administrative Tribunal, Customs, Excise and Gold (Control) Appellate Tribunal and Income-Tax Appellate Tribunal.'

Police

The Police force in the country is entrusted with the responsibility of maintenance of public order and prevention and detection of crimes. Public order and police being state subjects under the Constitution, police is maintained and controlled by states. The Police force in state is headed by the Director General of Police/ Inspector General of Police. State is divided into convenient territorial divisions called ranges and each police range is under the administrative control of a Deputy Inspector General of Police. A number of districts constitute the range. District police is further sub-divided into police divisions, circles and police-stations. Besides the civil police, states also maintain their own armed police and have separate intelligence branches, crime branches, etc. Police set-up in big cities like Delhi, Calcutta, Mumbai, Chennai, Bangalore, Hyderabad, Ahmedabad, Nagpur, etc., is directly under a Commissioner of Police who enjoys magisterial powers.

All senior Police posts in various states are manned by the Indian Police Service (IPS) cadres, recruitment to which is made on all-India basis. Recruitment, promotion and cadre control in respect of lower posts from police constable to deputy superintendent of police are done by the state governments. The Government maintains a number of Central forces. Central Bureau of Intelligence (IB) and

Central Bureau of Investigation (CBI), a number of institutions for training of police officers and scientific or technical assistance in investigation and detection of crimes are maintained by the Government.

Central Bureau of Investigation

The Central Bureau of Investigation (CBI) was created in April 1963. Prior to that the organisation was known as Special Police Establishment created and functioning under the Delhi Special Police Establishment Act, 1946. In 1963, after the creation of the Central Bureau of Investigation, the functions of this organisation were enlarged covering besides investigation the role of National Central Bureau for India under the International Criminal Police Organisation (INTERPOL), as also the Central Forensic Science Laboratory.

The CBI, through its Special Police Establishment Division, is the principal investigating agency of the Central Government and is concerned with the investigation cases of misconduct by public servants in the employment of Central Government and its corporate undertakings; cases in which the interest of the Central Government or any corporation or body set up and financed by the Central Government are involved, cases relating to breaches of Central laws in the enforcement of which the Central Government is interested; big cases of fraud, cheating and embezzlement and other cases when committed by organised gangs or professional criminals having inter-state or international ramifications. CBI derives its power to investigate offences mentioned above from the Delhi Special Police Establishment Act, 1946. CBI indexes criminals involved in international crimes and verifies fingerprints from various foreign national crime bureaux. INTERPOL notices are also circulated to various enforcement agencies in the country.

Indo-Tibetian Border Police

The Indo-Tibetan Border Police was raised in October 1962, in the wake of the Chinese aggression. The role being performed by ITBP is to : (i) safeguard the security of borders of India and promote a sense of security among the people living in border areas; (ii) prevent trans-border crimes, smuggling, unauthorised entry into or exit from the territory of India and any other illegal activity; (iii) provide security to sensitive installations, banks, persons of security risk and (iv) restore and preserve order in any area in the event of disturbance therein.

The ITBP has 29 battalions including four specialist battalions, three training institutions and six sector headquarters each headed by a DIG. The ITBP personnel are depolyed at high altitudes to guard the Indo-Tibetan Border, extending from Karakoram Pass in Ladakh (J&K) to Lipulekh Pass at the Tri Junction of Indo-Tibet-Nepal Border. ITBP escorts the pilgrims to the holy Kailash-Mansarover and provides them with medical and communication cover. Apart from its defined role, ITBP has specialised in the field of unconventional warfare, counter insurgency, anti-terrorist operations and mountain warfare. In addition to the primary role assigned to the Force, ITBP is also performing various other duties like VVIPs/VIPs secutiry, election duty, rescue and relief operations, conducting anti-naxalite operations, etc. The Force is also providing security cover to the High Commission of India in Sri Lanka.

ITBP is also recognised for mountaineering, skiing and river-rafting activities. Officers and men of ITBP have scaled the world's highest mountain, Mount Everest, four times making a tally of more than hundred glorious climbs in the Himalayas, Iran, Alps and USA to its credit. ITBP conducted two river-rafting expeditions—one in July 1997 in the river Indus and another in October, 1997 in the river Ganga. ITBP was awarded the best marching contingent trophy of the Republic Day Parade 1998 among the participating police forces.

Border Security Force

The Border Security Force (BSF) raised in 1965, is entrusted with the task of maintaining permanent vigilance on India's international borders. The present strength of BSF is 157 battations, and it is guarding a total of 6,622 km of international borders, including rugged terrain of mountains, inhospitable deserts, riverine and marshy areas. BSF has been assigned the role of promoting a sense of security amongst the people living in the border areas and preventing trans-border crimes, such as smuggling, infiltration/exfiltration and other illegal activities.

The BSF has made supreme sacrifices, 65 of its men having died and 3,089 of its personnel having been injured during the last seven years.

Assam Rifles

The Assam Rifles with its glorious history of 163 years is the oldest para-military force in the country. Raised as Cachar Levy in 1835, the Force has grown in size. With its present strength of 31 batallions, the force is primarily responsible for the security of Indo-Tibet and Indo-Myanmar border, conducting counter insurgency operations in the north-east and elsewhere in India and outside India when necessity demands. Thanks to its services rendered over the centuries, the Force has the distinction of being called "Friends of the Hill People".

National Security Guards

The National Security Guards (NSG) has been set up for handling terrorists, kidnappers, saboteurs, anti-hijacking operations, recovery of hostages, VIP security, etc. It is a highly trained and motivated Force for effectively dealing with terrorist activities in the country. It also trains state police commandos to upgrade their capability to meet the terrorist threats and carry out bomb detection/ defusion operations. The Force is required to achieve and maintain high standards of professional competence. This elite Force has so far carried out 89 operations in various parts of the country.

Central Reserve Police Force

The Central Reserve Police Force is an Armed Force of the Union of India for internal security management. This Force was raised in 1939 as the Crown Representative's Police and was renamed as Central Reserve Police Force in 1949. CRPF has 137 battalions, 10 RAF battalions 2 Mahila battalions, 5 Signal battalions and one Special Duty Group. The CRPF assists the state police forces in the maintenance of law and order. Presently its major commitments are in the north-east and Jammu and Kashmir.

Sardar Vallabhbhai Patel National Police Academy

The Sardar Vallabhbhai Patel National Police Academy is the premier police training institution in the country which imparts both basic and in-service training to Indian Police Service (IPS) officers. Established in 1948 at Mount Abu, Rajasthan, the Academy was shifted to Hyderabad in 1975. The training programmes conducted at the Academy are the basic course for IPS probationers, three in-service management courses for officers of the junior, middle and top levels of the Indian Police Service. Training of Trainers and Training Administrators Course, Vertical Interaction Course for IPS officers, and Vertically Integrated Training Programme for Indian Administrative Service officers, Foundational Course for All India Services and Civil Services (Group-A) probationers, and short-duration specialised courses, seminars and workshops for senior officers from IAS, IPS and judiciary Services. The Academy also promotes study and research on police-related topics.

Civil Defence

Civil Defence aims at saving life, minimising damage to property and maintaining continuity of industrial production in the event of any hostile attack. Central financial assistance to the states for Civil Defence measures is confined to categorised towns only. Civil Defence is primarily organised on voluntary basis except for a small nucleus of paid staff and establishment which is augmented during emergencies. At the moment Civil Defence activities are restricted to 162 categorised towns spread over 32 states/Union Territories. The present target of Civil Defence volunteers is 8.15 lakh, out of which 4.07 lakh have already been raised and trained.

National Civil Defence College, Nagpur, a subordinate training establishment of the Ministry, conducts various courses in Civil Defence and Disaster Relief Management. Up to March 1998, the College conducted five courses imparting training to 311 trainees. Since its inception in 1957, the College has trained 30,132 trainees.

Home Guards

Home Guards is a voluntary force, first raised in India in December 1946, to assist the police in controlling civil disturbances and communal riots. Subsequently, the concept of the voluntary citizens force was adopted by several states. In the wake of the Chinese aggression in 1962, the Centre advised the states and Union Territories to merge their existing voluntary organisations into one uniform voluntary force known as Home Guards. The role of Home Guards is to serve as an auxiliary to the police community in any emergency such as an air-raid, fire, cyclone, earthquake, epidemic, etc., help in maintenance of essential services, promote communal harmony and assist the administration in protecting the weaker sections, participate in socio-economic and welfare activities and perform Civil Defence duties. Home Guards are of two types-rural and urban. In border states, Border Wing Home Guards Battalions have also been raised, which serve as an auxiliary to the security forces. The total strength of Home Guards in the country is 5,73,793 against which the raised strength is 4,11,568 Home Guards. The organisation is spread over all states and Union Territories except in Arunachal Pradesh and Kerala.

Home Guards are raised under the Home Guards Acts and Rules of the states/ UTs. They are recruited from various cross-sections of the people such as doctors, engineers, lawyers, teachers, professionals, government servants, employees of public and private-sector organisations, senior students, agricultural and industrial workers , etc. All citizens of India, who are in the age-group of 18-50, are eligible to become members of Home Guards. Normal tenure of membership in Home Guards is three to : five years. Amenities and facilities given to Home Guards include free uniform and washing allowance, free boarding and lodging during training, cash awards and medals for gallantry, distinguished and meritorious services. A Home Guard, whenever called for duty/training, is paid duty/ training allowance at prescribed rates to meet out-of-pocket expenses. Members of Home Guards with three years services in the organisation are trained to police in maintenance of law and order, prevention of i crime, anti-dacoity measures, border patrolling, flood relief, prohibition, fire-fighting, election duties and social welfare activities.

The Ministry of Home Affairs formulates the policy in respect of role, target raising, training, equipping, establishment and other important matters. Expenditure on Home Guards is generally shared between Centre and state governments as per the existing policy. During 1996-97, Rs 28 crore had been reimbursed to states on raising and training of Home Guards and their deployment for various purposes including that of Lok Sabha/Vidhan Sabha elections. For the year 1997-98, the allocated budget of Rs 28 crore has also been fully utilised.

Fire Service

Fire is a state subject and fire services are administered by the states/UTs. The Ministry of Home Affairs renders technical advice to states/UTs and Central ministries on fire protection, fire prevention and fire legislation. For the modernisation of fire service in the states,– the Ministry of Home Affairs arranges GIC loans through the Ministry of Finance, Insurance Division. From 1980-81, a sum of Rs 253.30 crore GIC loans has been arranged for development of state fire services so far. fire Service College, Nagpur, conducts different types of courses for the training of fire officers in India. Since its inception in 1956, the College has so far trained 11,406 fire officers including 71 foreign trainees from 12 countries.

As per the statistics available in 1997, 2,023 fire stations manned by 64,048 fire professionals are operating in the country with a fleet of 6,202 appliances/vehicles.

Fire Service Week is observed through out India from 14 April every year as Martyrs Day, to pay homage to the brave firemen who lost their lives in the performance of duties.

Central Industrial Security Force

The Central Industrial Security Force (CISF) was established in 1969 to provide security to industrial undertakings of the Government. Starting from about 3,000 personnel the Force now numbers over 96,000. This Force has the responsibility to provide sophisticated security to both property and personnel deployed in industrial complexes of Central Governraent. The Force is governed by the CISF Act of 1968 and a set of Rules called CISF Rule of 1969. CISF is presently stationed in 233 public-sector undertakings.

National Institute of Criminology and Forensic Science

The National Institute of Criminology and Forensic Science, New Delhi, was siet up in 1972 to undertake research and training in criminology and forensic science. It conducts integrated in-service training programmes for the functionaries of criminal justice system.

Officers from Government departments and public-sector undertakings within the country and also from neighbouring countries come to this Institute for short-term and long-term orientation/international/professional courses. During the year 83 courses were conducted covering more than 1,550 officers drawn from criminal justice administration and the defence services. The Institute is a reference centre in the field of criminology and forensic science and has a rich library. It brings out a quarterly journal 'Indian Journal of Criminology and Criminalistics'.

Prisons

'Prisons' is a state subject under the Constitution of India. Prison administration is governed by the state governments under the provisions of the Indian Prisons Act and the respective Jail Manuals. The Central Government has been providing financial assistance to supplement the efforts of the state governments for modernisation of prison administration. Under the ongoing scheme for modernisation, Central assistance is provided for strengthening of security and communication arrangements, repair and renovation of prison buildings, medical facilities, vocational training, facilities for women offenders, etc. Assistance is also provided to a few selected states for construction of high security enclosures for accommodating hard-core terrorists. During the period from 1993 to March 1997 a grant of Rs 50.44 crore was released to various state governments.

Personal Law

The people of India are of different religions and faiths. They are governed by different sets of personal laws in respect of matters relating to family affairs, i.e., marriage, divorce, succession, etc.

Marriage

Law relating to marriage and/or divorce has been codified in different enactments applicable to people of different religions. These are:

1. The Converts' Marriage Dissolution Act, 1866;
2. The Indian Divorce Act, 1869;
3. The Indian Christian Marriage Act, 1872;
4. The Kazis Act, 1880;
5. The Anand Marriage Act, 1909;
6. The Child Marriage Restraint Act, 1929;
7. The Parsi Marriage and Divorce Act, 1936;
8. The Dissolution of Muslim Marriage Act, 1939;
9. The Special Marriage Act, 1954;
10. The Hindu Marriage Act, 1955;
11. The Foreign Marriage Act, 1969; and
12. The Muslim Women (Protection of Rights on Divorce) Act, 1986.

The Special Marriage Act, 1954 extends to the whole of India, except the State of Jammu and Kashmir and also applies to the citizens of India domiciled in territories to which the Act extends but who are in Jammu and Kashmir. Persons governed by this Act can specifically register marriage under the said Act even though they are of different religious faiths. The Act also provides that the marriage celebrated under any other form can also be registered under the Special Marriage Act, if it satisfies the requirements of the Act.

An attempt has been made to codify customary law which is prevalent among Hindus by enacting the Hindu Marriage Act, 1955. The Hindu Marriage Act, 1955, which extends to the whole of India, except the State of Jammu and Kashmir, applies also to Hindus domiciled in territories to which the Act extends and who are outside the said territories. It applies to Hindus (in any of its forms or developments) and also to Buddhists, Sikhs, Jains and also those who are not Muslims, Christians, Parsis or Jews by religion. However, the Act does not apply to members of any scheduled tribes unless the Central Government by notification in the official Gazette otherwise directs. provisions in regard to divorce are contained in Section 13 of the Hindu Marriage Act and Section 27 of the Special Marriage Act. Common ground on which divorce can be sought by a husband or a wife under these Acts fall under broad heads: adultery, desertion, cruelty, unsoundness of mind, venereal disease, leprosy, mutual consent and being not heard of as alive for seven years. As regards the Christian community, provisions relating to marriage and divorce are contained in the Indian Christian Marriage Act, 1872 and the Indian Divorce Act, 1869 respectively. Provisions in regard to divorce applicable to the Christian community are contained in Section 10 of the Indian Divorce Act. Under that Section, the husband can seek divorce on grounds of adultery on the part of his wife and the wife can seek divorce on the ground that the husband has become convert to another religion and has gone through marriage with another woman or has been guilty of (a) incestuous adultery, (b) bigamy with adultery, (c) marriage with another woman with adultery, (d) rape, sodomy or bestiality, (e) adultery coupled with such cruelty as without adultery would have entitled her to a divorce, a mensa etoro (a system of divorce created by the Roman Church equivalent to judicial separation on grounds of adultery, perverse practices, cruelty, heresy and apostasy) and (f) adultery coupled with desertion without reasonable excuse for two years or more.

As regards Muslims, marriages are governed by the Mohammedan Law prevalent in the country. As regards divorce, i.e., Talaq, a Muslim wife has much restricted right to dissolve her marriage. Unwritten and traditional law tried to ameliorate her position by permitting her to seek dissolution under the following forms : (a) Talaq-i-Tafwid: This is a form of delegated divorce. According to this, the husband delegates his right to divorce in a marriage contract which may stipulate that, inter alia, on his taking another wife, the first wife has a right to divorce him; (b) Khula : This is a dissolution of agreement between the parties to marriage on wife's giving some consideration to husband for her release from marriage ties. Terms are a matter of bargain and usually take the form of the wife giving up her mehr or a portion of it; and (c) Mubarat: this is divorce by mutual consent.

Further, by the Dissolution of Muslim Marriage Act, 1939, a Muslim wife has been given right to dissolve marriage on these grounds: (i) whereabouts of the husband have not been known for a period of four years; (ii) husband is not maintaining her for a period of two years; (iii) imprisonment of husband for a period of seven years or more; (iv) failure on the part of husband to perform his marital obligations, without a reasonable cause, for a period of three years; (v) impotency of husband; (vi) insanity for a period of two years; (vii) suffering from leprosy or virulent venereal disease; (viii) marriage took place before she attained the age of 15 years and not consummated; and (ix) cruelty.

The Parsi Marriage and Divorce Act, 1936 governs the matrimonial relations of Parsis. The word 'Parsi' is defined in the Act as a Parsi Zoroastrian. A Zoroastrian is a person who professes the Zoroastrian religion. It has a racial significance. Every marriage as well as divorce under this Act is required to be registered in accordance with the procedure prescribed in the Act. However, failure to fulfill requirements on that behalf does not make marriage invalid. The Act provides only for monogamy. By the Parsi Marriage and Divorce (Amendment) Act, 1988 (5 of 1988), scope of certain provisions of the Parsi Marriage and Divorce Act, 1936 have been enlarged so as to bring them in line with the Hindu Marriage Act, 1955.

As for the matrimonial laws of Jews, there is no codified law in India. Even today, they are governed by their religious laws. Jews do not regard marriage as a civil contract, but as a relation between two persons involving very sacred duties. Marriage can be dissolved through courts on grounds of adultery or cruelty. Marriages are monogamous.

Child Marriage

The Child Marriage Restraint Act, 1929, as amended in 1978, now provides that marriage age for male will be 21 years and for female 18 years. This amendment has been brought into force from 1 October, 1978.

Adoption

Although there is no general law of adoption, yet it is permitted by a statute amongst Hindus and by custom amongst a few numerically insignificant categories of persons. Since adoption is legal affiliation of a child, it forms the subject matter of personal law. Muslims, Christians and Parsis have no adoption laws and have to approach court under the Guardians and Wards Act, 1890. Muslims, Christians and Parsis can take a child under the said Act only under foster care. Once a child under foster care becomes major, he is free to break away all his connections. Besides, such a child does not have legal right of inheritance. Foreigners, who want to adopt Indian children have to approach the court under the aforesaid Act. In case the court has given permission for the child to be taken out of the country, adoption according to a foreign law, i.e., law applicable to guardian takes place outside the country.

Hindu law relating to adoption has been amended and codified into the Hindu Adoptions and Maintenance Act, 1956 (78 of 1956), under which a male or female Hindu having legal capacity, can take a son or daughter in adoption. In dealing with the question of guardianship of a minor child, as in other spheres of family law, there is no uniform law. Hindu Law, Muslim Law and the Guardians and Wards Act, 1890 are three distinct legal systems which are prevalent. A guardian may be a natural guardian, testamentary guardian or a guardian appointed by the court. In deciding the question of guardianship, two distinct things have to be taken into account- person of the minor and his property. Often the same person is not entrusted with both.

The Hindu Minority and Guardianship Act, 1956 (32 of 1956) has codified laws of Hindus relating to minority and guardianship. As in the case of uncodified law, it has upheld the superior right of father. It lays down that a child is a minor till the age of 18 years. Natural guardian for both boys and unmarried girls is first the father and then the mother. Prior right of mother is recognised only for the custody of children below five. In case of illegitimate children, the mother has a better claim than the putative father. The act makes no distinction between the person of the minor and his property and, therefore guardianship implies control over both. The Act directs that in deciding the question of guardianship, courts must take the welfare of child as the paramount consideration.

Under the Muslim law, the father enjoys a dominant position. It also makes a distinction between guardianship and custody. For guardianship, which has usually reference to guardianship of property, according to Sunnis, the father is preferred and in his absence his executor. If no executor has been appointed by the father, the guardianship passes on to the paternal grandfather. Among Shias, the difference is that the father is regarded as the sole guardian but after his death, it is the right of the grandfather to take over responsibility and not that of the executor. Both schools, however, agree that father while alive is the sole guardian. Mother is not recognised as a natural guardian even after the death of the father.

As regards rights of a natural guardian, there is no doubt that father's right extends both to property and person. Even when mother has the custody of minor child, father's general right of supervision and control remains. Father can, however, appoint mother as a testamentary guardian. Thus, though mother may not be recognised as natural guardian, there is no objection to her being appointed under the father's will.

Muslim law recognises that mother's right to custody of minor children (Hizanat) is an absolute right. Even the father cannot deprive her of it. Misconduct is the only condition which can deprive the mother of this right. As regards the age at which the right of mother to custody terminates, the Shia school holds that mother's right to the Hizanat is only during the period of rearing which ends when the child completes the age of two, whereas Hanafi school extends the period till the minor son has reached the age of seven. In case of girls, Shia laws uphold mother's right till the girl reaches the age of seven and Hanafi school till she attains puberty.

The general law relating to guardians and wards is contained in the Guardians and Wards Act, 1890. It clearly lays down that father's right is primary and no other person can be appointed unless the father is found unfit. This Act also provides that the court must take into consideration the welfare of the child while appointing a guardian under the Act.

Maintenance

Obligation of a husband to maintain his wife arises out of the status of the marriage. Right to maintenance forms a part of the personal law.

Under the Code of Criminal Procedure, 1973 (2 of 1974), right of maintenance extends not only to the wife and dependent children, but also to indigent parents and divorced wives. Claim of the wife, etc., however, depends on the husband having sufficient means. Claim of maintenance for all dependent persons is limited to Rs 500 per month. Inclusion of the right of maintenance under the Code of Criminal Procedure has the great advantage of making the remedy both speedy and cheap. However, divorced wives who have received money payable under the customary personal law are not entitled to maintenance claims under the Code of Criminal Procedure.

Under Hindu Law, the wife has an absolute right to claim maintenance from her husband. But she loses her right if she deviates from the path of chastity. Her right to maintenance is codified in the Hindu Adoptions and Maintenance Act, 1956 (78 of 1956). In assessing the amount of maintenance, the court takes into account various factors like position and liabilities of the husband. It also judges whether the wife is justified in living apart from husband. Justifiable reasons are spelt out in the Act. Maintenance pendente lite (pending the suit) and even expenses of a matrimonial suit will be borne by either, husband or wife, if the either spouse has no independent ncome for his or her support. The same principle will govern payment of permanent maintenance.

Under the Muslim Law, the Muslim Women (Protection of Rights on Divorce) Act, 1986 protects rights of Muslim women who have been divorced by or have obtained divorce from their husbands and provides for matters connected therewith or incidental thereto. This Act inter alia provides that a divorced Muslim woman shall be entitled to (a) reasonable and fair provision and maintenance to be made and paid to her within the iddat period by her former husband; (b) where she herself maintains children born to her before or after her divorce, a reasonable and fair provision and maintenance to be made and paid by her former husband for a period of two years from the respective dates of birth of such children; (c) an amount equal to the sum of mehr or dower agreed to be paid to her at the time of her marriage or at any time thereafter according to the Muslim Law; and (d) all property given to her before or at the time of marriage or after her marriage by her relatives or friends or by husband or any relatives of the husband or his friends.

In addition, the Act also provides that where a divorced Muslim woman is unable to maintain herself after the period of iddat the magistrate shall order directing such of her relatives as would be entitled to inherit her property on her death according to the Muslim Law, and to pay such reasonable and fair maintenance to her as he may determine fit and proper, having regard to the needs of the divorced woman, standard of life enjoyed by her during her marriage and means of such relatives, and such maintenance shall be payable by such relatives in proportion to the size of their inheritance of her property and at such periods as he may specify in his order.

Where such divorced woman has children, the Magistrate shall order only such children to pay maintenance to her, and in the event of any such children being unable to pay such maintenance, the magistrate shall order parents of such divorced woman to pay maintenance to her.

In the absence of such relatives or where such relatives are not in a position to maintain her, the magistrate may direct State Wakf Board established under Section 13 of the Wakf Act, 1995 functioning in the area in which the woman resides, to pay such maintenance as determined by him.

The Parsi Marriage and Divorce Act, 1936 recognises the right of wife to maintenance-both alimony pendente lite and permanent alimony. The maximum amount that can be decreed by court as alimony during the time a matrimonial suit is pending in court, is one-fifth of the husband's net income. In fixing the quantum as permanent maintenance, the court will determine what is just, bearing in mind the ability of husband to pay, wife's own assets and conduct of the parties. The order will remain in force as long as wife remains chaste and unmarried.

The Indian Divorce Act, 1869 inter alia governs maintenance rights of a Christian wife. The provisions are the same as those under the Parsi law and the same considerations are applied in granting maintenance, both alimony pendente lite and permanent maintenance.

Succession

The Indian Succession Act was enacted in 1925. The object of the Act was to consolidate the large number of laws which were in existence at that time. Laws governing succession to Muslims and Hindus were excluded from the purview of the Act. While consolidating the laws in respect of succession, two schemes, one relating to succession to property of persons like Indian Christians, jews and persons married under the Special Marriage Act, 1954 and the other relating to succession rights of Parsis, were adopted.

In the first scheme, applying to those other than Parsis, in the case of a person dying intestate leaving behind a widow and lineal descendants, the widow would be entitled to a fixed share of one-third of property and lineal descendants shall be entitled to the remaining two-third. This law was amended subsequently with the object of improving rights of widows and it was provided that where the intestate dies leaving behind his widow and no lineal descendant and the net value of the estate does not exceed Rs 5,000, the widow would be entitled to the whole of his property. Where the net value of the estate exceeds Rs 5,000 she is entitled to charge for the sum of Rs 5,000 with interest at four per cent payment and in the residue, she is entitled to her share. The Act imposes no restriction on the power of a person to will away his property.

Under the second scheme, the Act provides for Parsi intestate succession. By the Indian Succession (Amendment) Act, 1991 (51 of 1991), the Act has been amended to provide equal shares for both sons and daughters in their parental properties, irrespective of the fact that it was that of the father or that of the mother. It also enables the Parsis to bequeath their property to religious or charitable purposes, etc., without any restrictions. In effect the amended law provides that where a Parsi dies intestate leaving behind a widow or widower as the case may be, and children, the property shall be divided so that the widow or widower and each child receives equal shares. Further, where a Parsi dies leaving behind one or both parents in addition to children, or widow or widower and children, the property shall be so divided that the parent or each of the parents shall receive a share equal to half the share of each child.

The law relating to intestate succession among Hindus is codified in the Hindu Succession Act, 1956 (30 of 1956). It extends to the whole of India except the State of Jammu and Kashmir. The remarkable features of the Act are the recognition of the right of women to inherit property of an intestate equally with men and abolition of the life estate of female heirs.

A vast majority of Muslims in India follow Hanafi doctrines of Sunni law. Courts presume that Muslims are governed by Hanafi law unless it is established to the contrary. Though there are many features in common between Shia and Sunni schools, yet there are differences in some respects. Sunni law regards Koranic verses of inheritance as an addendum to pre-Islamic customary law and preserves the superior position of male agnates. Unlike Hindu and Christian law, Muslim law restricts a person's right of testation. A Muslim can bequeath only one-third of his estate. A bequest to a stranger is valid without the consent of heirs if it does not exceed a third of the estate, but a bequest to an heir without the consent of other heirs is invalid. Consent of heirs to a bequest must be secured after the succession has opened and any consent given to a bequest during the lifetime of the testator can be retracted after his death. Shia law allows Muslims the freedom of bequest within the disposable third.

Laws of Parliament

During 1997, 35 Bills were enacted into Acts. A list of these Acts is furnished at appendices. Scope and purpose of some of the Laws enacted during 1997 are as under:

(1) The Indian Contract (Amendment) Act, 1996 (1 of 1997): The Law Commission of India has recommended in its 97th report that section 28 of the Indian Contract Act, 1872 may be amended so that the anomalous situation created by the existing section may be rectified.

The Indian Contract (Amendment) Act, 1996 amends section 28 of the Indian Contract Act, 1872 as it harms the interests of the consumer dealing with big corporations and causes serious hardship to those who are economically disadvantaged.

(2) Keeping in view the needs and aspirations of the Urdu-speaking people, particularly the Urdu-speaking women, it was decided that a University be set up to impart education in various disciplines including vocational and technical subjects in Urdu medium through conventional and distance education.

Having regard to the all-India character of the University and in order to prepetuate the memory of Maulana Abul Kalam Azad, it was decided to name the University as "Maulana Azad National Urdu University".

The Act established the University with headquarters at Hyderabad.

(3) The Mahatma Gandhi Antarrashtriya Hindi Vishwavidyalaya Act, 1996 (3 of 1997): Hindi is the official language of the Union and is a link language within the country. Though Hindi is taught and studied in most of the Indian universities and nearly 150 universities abroad, there is no centralised institution or a Centre of studies which coordinates, develops or directs programmes to meet such expectations.

With the above objects in view, it was decided to establish the Mahatma Gandhi Antarrashtriya Hindi Vishwavidyalaya at Wardha. It was proposed to be established after the name of the Father of the Nation to commemorate his 125th Birth Anniversary at Wardha because of his intimate association with that city.

The Act, inter alia, achieves the above objects.

(4) The Apprentices (Amendment) Act, 1996 (4 of 1997): The Apprentices Act, 1961 provides for regulation and control of training of apprentices. In the functioning of the said Act, certain problems have been faced. The amendments proposed in the Act seek to achieve certain goals: (i) In order to seek financial benefits from the Government, certain employers treat some departments of their establishments as separate. It was proposed to amend clause (g) of section 2 to amplify the definition of "establishment" in this regard; (ii) The expression "worker" has not been defined in the Act which has caused confusion with regard to determination of the strength of workers. A new clause (r) in section 2 was proposed to be inserted; (iii) In cases, where the contract of the apprenticeship has been terminated before the expiry of the period of apprenticeship and a contract of apprenticeship has been entered into with a new employer and the contract of the apprenticeship could not be completed with the previous employer because of lapse on the part of such employer, it was proposed to provide that the period of apprenticeship training undergone with the previous employer shall be deemed to be included in period of apprenticeship training to be undertaken with the new employer. A new sub-section (4) was proposed to be inserted in section 7 for the purpose; (iv) Sub-section (3) of section 8 was proposed to be amended for providing some measure of flexibility in the engagement of apprentices keeping in view the potentiality and availability of training facilities with individual employers; (v) Since industry is the ultimate beneficiary of the training through apprentices, it was proposed to amend sub-section (8) of section 9 to provide that industry should increasingly bear training cost of apprentices; (vi) In order to improve the quality of apprenticeship training section 11 was proposed to be amended so that the qualifications of the instructional staff might be as prescribed; (vii) Section 31 was proposed to be amended in order to enhance the amount of penalty which may be imposed; (viii) Section 33 was proposed to be amended to provide that an officer of the rank of the Deputy Apprenticeship Adviser or above shall be competent to make a complaint before the court about an offence. The Act seeks to achieve the above objectives.

(5) The Companies (Amendment) Act, 1996 (5 of 1997): In 1977, Government appointed a Committee for the amendment of the Companies Act, 1956 and the Monopolies and Restrictive Trade Practices Act, 1969, popularly known as the Sachar Committee. Some of the recommendations of the Sachar Committee led to the Companies (Amendment) Acts of 1985 and 1988. However, while considering the proposals which led to the enactment of the Companies (Amendment) Act, 1988, a decision was taken by Government for a comprehensive review of the existing law. Accordingly, the Companies Bill, 1993 was introduced in the Rajya Sabha on 14 May, 1993. The Bill has not yet been taken up for consideration. In view of suggestions from the different forums the Government feels that the Bill would require comprehensive revision keeping in view the changes which have taken place in the capital market, operation of corporate sector and liberalisation policies. For this purpose and having due regard to the statement made on 22 July 1996 in Parliament, the Government has set up a working group to revise the Act. Since this process would take considerable time for completion, the principal Act to be amended, inter alia, is as follows:– (i) to provide protection to the depositors; (ii) to provide protection to employees' interest in case of winding up of a company; (iii) to simplify some procedural and legal requirements in the interest of the corporate sector.

(6) The Special Court (Trial of Offences Relating to Transactions in Securities) Amendment Act, 1997 (6 of 1997): The Special Court (Trial of Offences Relating to Transactions in Securities) Act, 1992 was enacted on 6 June, 1992 to provide for the establishment of a Special Court for the trial of offences relating to transactions in securities and for matters connected therewith or incidental thereto. Section 5 of the Act confers power upon the Central Government to establish a Court called the Special Court consisting of a sitting Judge of the High Court nominated by the Chief Justice of the High Court within the local limits of whose jurisdiction the Special Court is situated, with the concurrence of the Chief Justice of India. The Central Government established at Mumbai in June 1992 a Special Court consisting of a sitting Judge of the Bombay High Court, Justice S.N. Variava, for dealing with the cases under the aforesaid Act. Since establishment of the Special Court in 1992 about 2,910 matters have been filed before the Special Court. In addition, the Central Bureau of Investigation have also registered 70 cases relating to irregularities in transactions of securities and in 18 cases charge-sheets have been filed in the Special Court. In order to expedite disposal of cases pending in the Special Court, it has become necessary to appoint additional Judges in the Special Court. As Parliament was not in session, the President promulgated on 16 January 1997 the Special Court (Trial of Offences Relating to Transactions in Securities) Amendment Ordinance, 1997 (Ord. 6 of 1997) to provide for appointment of additional Judges in the Special Court and also to provide for assignment of cases amongst them. The Act replaces the said Ordinance.

(7) The Depositories Related Laws (Amendment) Act, 1997 (8 of 1997): The Depositories Act, 1996 provides, inter alia, for a legal framework for the establishment of depositors for dealing in securities. However the said Act allows only securities of companies to be dealt in a depository mode. The securities of statutory bodies like the Industrial Development Bank of India, Unit Trust of India, State Bank of India and other banks established under the Banking Companies (Acquisition and Transfer of Undertakings) Act, 1970 and the Banking Companies (Acquisition and Transfer of Undertakings) Act 1980 could not be dealt with in a depository mode. In order to remove this lacuna and also to give effect to certain consequential changes, the Depositories Related Laws (Amendment)

Ordinance, 1997 (Ord. 5 of 1997) was promulgated on 15 January 1997 amending the Depositories Act, 1996, the Companies Act, 1964, the State Bank of India Act, 1955, the State Bank of India (Subsidiary Banks) Act, 1959, the Banking Companies (Acquisition and Transfer of Undertakings) Act, 1970, the Banking Companies Acquisition and Transfer of Undertakings) Act, 1980 and the Indian Stamp Act, 1899.

The Act replaces the said Ordinance.

(8) **The Income-tax (Amendment) Act, 1997 (14 of 1997):** The Finance Act, 1995 introduced a new Chapter XIV-B in the Income-tax Act, 1961 so as to provide a new scheme of assesment of undisclosed income determined in respect of searches initiated on or after 1 July 1995. Under this scheme the undisclosed income detected as a result of search initiated after 30 June 1995 was assessed separately as the income of a block period which consists of a period of ten previous years prior to the previous year in which the search was conducted and also the period of current previous years up to the date of search. The undisclosed income was taxed at a flat rate of 60 per cent and no penalty under sections 271(1)(c), 271A or 271B or interest under sections 234A, 234B or 234C was leviable. It was also provided that the order of assessment for the block period had to be passed within one year from the end of the month in which the last of the search authorisations was executed. In order to enhance the deterrent effect of searches and to enable better assessment of such cases, it was proposed to amend the provisions of Chapter XIV-B by an Ordinance.

The Finance (No. 2) Act, 1996, amended the provisions of section 80G of the Income-tax Act by inserting clause (iii, b) in sub-section (2) so as to provide for 100 percent deductions made to the funds established by the state governments to provide medical relief to the poor. Similar benefit was proposed to be extended to the National Illness Assistant Fund constituted by the Central Government. Any amount of donation to this fund would be eligible for 100 percent deduction from the total income of the donor at the time of computation of his total income.

Under the provisions of section 54EA of the Income-tax Act, 1961, long-term capital gains were exempt from Income tax, if the whole or any part of the net sale consideration was invested in bonds, debentures or units of any mutual funds. However, investment in shares did not qualify for exemption from long-term capital gains under section 54EA. To inject more liquidity into the capital market it was proposed to include shares of a public company in the list of securities, investment in which would qualify for exemption under section 54EA. Whereas, Parliament was not in session and the amendment to the provisions of the Income tax Act as mentioned above were to be carried out immediately, the Income-tax (Second Amendment) Ordinance 1996 (Ord. 32 of 1996) was promulgated by the President on 31 December 1996. The act replaces the said Ordinance.

(9) **The Port Laws (Amendment) Act, 1997 (15 of 1997):** There are eleven major ports in the country, six on the west coast (Kandla, Bombay, Jawaharlal Nehru Port, Marmagao, New Mangalore and Cochin) and Eve on east coast (Calcutta including Haldia, Paradip, Visakhapatnam, Chennai and Tuticorin) which are administered by the Port Trust under the control of Central Government. Over 90 per cent of India's sea trade moves through the 11 major ports. The traffic being handled at the major ports has been increasing steadily over the years.

On the conservative estimate of cumulative growth of nine per cent per annum in terms of traffic, our ports would need to be capable of handling a traffic of approximately 850 MT by 2012. This would call for 300 to 400 additional berths to handle cargo of different kinds. The creation of additional port capacity of this order at the current costs would require an investment of over Rs 40,000 crore. Projections made by the Ministry of Surface Transport indicate that not more than Rs 10,000 to Rs 12,000 crore would be available from plan funds and the internal resources of the ports for investment in port development and the balance would have to come from the private sector or the capital market.

Recently the Government had laid down guidelines for private-sector participation in the major ports. Therefore, it was felt that there should be a regulatory authority for determining the various rates and charges for services rendered both by the major ports and private providers of port facilities in order to provide a measure of transparency in the charges collected at major ports.

The President accordingly promulgated the Port Laws (Amendment) Ordinance, 1997 (Ord. 1 of 1997) on 9 January 1997 to amend the Indian Ports Act, 1908 (15 of 1908) and the Major Ports Trusts Act, 1963 (38 of 1963) to enable the Central Government to set up a tariff authority for major ports. The Authority shall fix the various port charges-both vessel-related, and cargo-related hitherto being fixed by the various Port Trust Boards with the approval of the Central Government. The Authority shall also be vested with the powers to fix the rates/charges to be collected by private providers of port facilities.

The Act replaces the said Ordinance.

(10) The National Highways Laws (Amendment) Act, 1997 (16 of 1997): The National Highways Authority of India Act, 1988 was amended so as to provide that the National Highways Authority of India may seek the participation of the private sector in respect of the highways vested in the Authority. In order to provide adequate capital and loans to the National Highways Authority of India by the Central Government, it was proposed to make amendments in the National Highways Authority of India Act, 1988.

The National Highways Laws (Amendment) Ordinance, 1997 (Ord. 9 of 1997) was promulgated by the President on 24 January, 1997.

The Act replaces the aforesaid Ordinance.

(11) Lalit Kala Akademi (Taking over of Management) Act, 1997 (17 of 1997) : The Govemment of India in 1988 set up a Committee under the Chairmanship of Shri P.N. Haksar to go into the functioning of National Academies and to recommend structural and other changes that may be necessary for the purposeful functioning of these Akademies. The Committee submitted its recommendations to the Government of India which in respect of the Lalit Kala Akademi included restructuring of the General Council, Executive Board and Electoral College. Despite prolonged consultations for some years by the Department of Culture, the Lalit Kala Akademi did not accept some of the more important recommendations of the Haskar Committee although the other two Academies have.

As serious difficulties had arisen with regard to the management of the Lalit Kala Akademi and as any delay in taking the necessary remedial action would have been highly detrimental to the interests and objectives of the Lalit Kala Akademi, it has been considered necessary for the Central Government to take over its management for a limited period. As Parliament was not in session, the President promulgated on 24 January 1997, the Lalit Kala Akademi (Taking over of Management) Ordinance, 1997 (Ord. 10 of 1997).

The Act replaces the said Ordinance.

(12) The National Commission for Safai Karamcharis (Amendment) Act, 1997 (18 of 1997): The Government of India has been implementing special schemes for the liberation and rehabilitation of Safai Karamacharis and their dependents, besides the various other steps taken for their social, economic and educational uplift. The original target was to end the obnoxious practice of manual scavenging by the end of the Eighth Five Year Plan. But the task could not be completed due to the tardy progress in most of the states. It was proposed to end this practice, a stigma on our social fabric, by the end of the Ninth Five Year Plan. As there was no separate agency at the Central level to study, evaluate and monitor the schemes for liberation and rehabilitation of Safai Karmcharis, the National Commission for Safai Karamcharis was constituted in the year 1993 as a body at the national level under the National Commission for Safai Karamcharis Act, 1993. The said Act was to expire on 1 April 1997. The functioning of the Commission during the previous three years was appreciable in terms of their set goals and objectives. Since the task of putting an end to manual scavenging was to be completed by the end of the Ninth Five Year Plan, it was proposed to extend the operation of the Act till 31 March, 2002.

(13) The National Environment Appellate Authority Act, 1997 (22 of 1997): Clause (v) of sub section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) empowers the Central Government to impose restrictions in the areas in which any industries, operations or processes or class of industries, operations or processes shall not be carried out or shall be carried out subject to certain safeguards. In view of recent pronouncements by the Supreme Court in certain public-interest litigation cases involving environmental issues, it was considered necessary to set up an independent body for quick redressal of public grievances.

Consequently, an Ordinance was promulgated providing for the establishment of a National Environment Appellate Authority to deal with petitions, complaints, representations or appeals against the grant of environmental clearance to projects.

The Act replaces the said Ordinance.

(14) The Reserve Bank of India (Amendment) Act, 1997 (23 of 1997) : The Joint Parliamentary Committee which enquired into the irregularities in securities and banking transactions had recommended that the Government examine whether the legislative framework for regulating NBFCs is sufficiently wide. The Working Group on Financial Companies appointed by Reserve Bank of India (RBI) under the Chairmanship of Dr. A.C. Shah had suggested regulatory and control measures to ensure the healthy growth and operations of these companies.

The Reserve Bank of India (Amendment) Ordinance, 1997, to further amend the Reserve Bank of India Act, provides several safeguards for the NBFCs so as to ensure their viability. These include compulsory registration of the NBFCs with Reserve Bank of India (RBI), stipulation of minimum net-owned funds requirement, creation of reserve fund and transfer of a certain percentage of profits every year to the fund and prescription of liquidity requirement. RBI has also been vested with powers to issue guidelines encompassing aspects such as income recognition, accounting standards, provision for bad and doubtful debts, capital adequacy, etc., which are intended to ensure sound and healthy operations and the quality of assets of these companies. RBI has also been empowered to issue directions to the auditors of NBFCs, to order special audit of NBFCs, prohibit acceptance of deposit by NBFCs, and to make application for winding up of NBFCs. Whereas earlier the only recourse available to the depositor was to approach the Court of Law for redressal of grievances, powers have been vested with the Company Law Board for directing the defaulting NBFCs to make repayment of the deposit/interest with a view to protecting the interests of the depositors.

The incorporated bodies have been totally prohibited from accepting deposits for purposes other than for personal use. However, unincorporated bodies, partnership firms and individuals have been allowed to accept loans and deposits for their legitimate business activities. They have been permitted to continue to take deposits after incorporating themselves within the regulatory framework. The unincorporated bodies have also been specifically prohibited from issuing any advertisements in any form.

There were reports of several finance companies and unincorporated bodies having failed to repay the deposits collected from unsuspecting depositors who have been tempted by the attractive returns and incentives offered. Concern has been expressed in several quarters on the need to take urgent steps to regulate the activities of such companies and unincorporated bodies.

As Parliament was not in session, the President promulgated the Reserve Bank of India (Amendment) Ordinance, 1997 (Ord. 2 of 1997) on 9 January, 1997.

The Act replaces the above Ordinance.

(15) The Telecom Regulatory Authority of India Act, 1997 (24 of 1997): In the context of the National Telecom Policy, 1994 which, while stressing, amongst others, the need to achieve universal services, seeks to bring the quality of telecom services on par with world standards, to provide for a wide range of services to meet customers' demands at reasonable prices and to provide for participation of companies registered in India in the area of basic as well as value-added services. To arrange for the protection and promotion of consumers' interest and to ensure fair competition, it was felt necessary to separate the regulatory functions from the service-providing functions which will be in keeping with the general trends in the world. In the multi-operator situation, arising out of the opening of basic as well as value-added services in which private operators will be competing with the Government operators, there was a pressing need for an independent telecom regulatory body for regulation of telecom services and the orderly and healthy growth of the Telecommunications infrastructure, besides the protection of interests of the consumers.

Earlier, it was proposed to set up an independent Telecom Regulatory Authority as a non-statutory body and for that purpose the Indian Telegraph (Amendment) Bill, 1995 was introduced and then passed by the Lok Sabha on 6 August 1995. At the time of consideration of the Bill in the Rajya Sabha, the Members of that House expressed the view that steps should be taken to set up a statutory authority. Similar views were also expressed by the

Standing Committee on Communications. To achieve the aforesaid object, a comprehensive Bill, namely, the Telecom Regulatory Authority of India, 1995 was prepared and notice for introduction was sent to the Lok Sabha but the same could not be introduced. Subsequently, on 27 January, 1996 the Telecom Regulatory Authority of India Ordinance, 1996 (Ord. 10 of 1996) was promulgated with a view to conferring statutory status on the Telecom Regulatory Authority. A Bill to replace the said Ordinance was introduced in the Lok Sabha on 27 February 1996. The same could not come up for consideration and passing in the 16th session of the Lok Sabha. Consequently, the Telecom Regulatory Authority of India (Second) Ordinance, 1996 was promulgated on 27 March, 1996. Again the Telecom Regulatory Authority of India (Second) Ordinance, 1996 (Ord. 20 of 1996) lapsed on 4 July 1996. Later on the Telecom Regulatory Authority of India Bill, 1996 was introduced on 23 July 1996. This Bill was referred to the Standing Committee on Communications and the report of the Standing Committee was tabled in both Houses of Parliament in November 1996.

The Government, after considering the report, decided to set up the authority on the lines of the Telecom Regulatory Authority of India Bill, 1996 incorporating therein suggestions of the Standing Committee with modifications and in certain cases without modifications. As the Parliament was not in session and the President was satisfied that circumstances existed which rendered it necessary for him to take immediate action, the Telecom Regulatory Authority of India Ordinance, 1997 (Ord. 11 of 1997) was promulgated on 25 January, 1997.

The salient features of the Act which replaces the said Ordinance are as follows:

(i) the Authority shall consist of a Chairperson and a minimum of two and a maximum of six members; (ii) a person who is or has been a Judge of the Supreme Court or who is or has been the Chief Justice of a High Court shall be eligible to be appointed Chairperson of the Authority; (iii) the members shall be persons of ability with varied experience in public-utility services who have special knowledge of and professional experience in the field of telecommunications, industry, finance, accountancy, law management and consumer affairs. No appointment of a person possessing qualifications as specified above, shall be made as a member from amongst employees of the Government unless such person has held the post of Secretary or Additional Secretary or any equivalent post in the Central or State Governments for a period of not less than three years; (iv) the powers and functions of the Authority, inter alia, are to— (a) recommend the need and timing for introduction of a new service-provider; (b) recommend the terms and conditions of the licence to a service-provider; (c) ensure technical compatibility and effective interconnection between different service-providers; (d) regulate arrangements of sharing of revenue derived from providing telecommunication services amongst service-providers; (e) recommend revocation of licence for non-compliance of terms and conditions of licence ; (f) ensure compliance of terms and conditions of licence; (g) protect the interests of customers of telecommunication service; (h) settle disputes between service-providers; (i) fix rates for providing telecommunication services within India and outside India; (j) ensure effective compliance of universal service obligations; (k) monitor the quality of service and conduct periodical survey of such services provided by the service-providers; and (l) inspect the equipment used in the network and recommend the type of equipment to be used by the service-provider.

The Authority shall have an in-built dispute settlement mechanism including procedure to be followed in this regard as well as a scheme of punishment in the event of non-compliance of its orders. The Authority will have to maintain transparency while exercising its powers and functions. The powers and functions would enable the Authority to perform the role of watchdog for the telecom sector in an effective manner. In order that the Authority may function in a truly independent manner and discharge its assigned responsibilities effectively, it is proposed to vest the Authority with statutory status.

(16) The Rice Milling Industry (Regulation) Repeal Act, 1997 (28 of 1997): The Rice Milling Industry (Regulation) Act, 1958 was enacted to regulate the establishment of rice mills in the country for ensuring adequate supply of rice and to ensure that rice mills both then existing and new are equipped with and use modern technology. Government was monitoring the progress of setting up and modernisation of rice mills in the country and it was found that the broad objectives of enacting the Rice Milling Industry (Regulation) Act, 1958 had been achieved as the number of modern rice mills had gone up from practically nil in 1970 to 34,163 as on 1 January, 1996.

It was estimated that nearly sixty-five per cent of the total paddy produced in the country is processed in modern rice mills. Besides, most of the commercial rice millers in the country are now aware of the advantages of setting up modern rice mills and of modernising their old units which had been yielding high ,percentages of broken and inferior quality by-products.

Considering the above-mentioned facts and in the context of the liberalised investment environment of the country, it became necessary to repeal the Rice Milling Industry (Regulation) Act, 1958.

This Act achieves the aforesaid objects.

(17) The Seamen's Provident Fund (Amendment) Act, 1997 (29 of 1997): The Seamen's Provident Fund Act, 1966 provides for the institution of a provident fund for Seamen. Certain difficulties have been experienced in the implementation of the provisions of the Act. In order to remove these difficulties it was proposed to amend the Act as follows: (i) It was proposed to amend the definition of 'seamen', to include certain categories of persons (hitherto excluded) within the said definition; (ii) It was proposed to amend section 4 to provide for the money received in the Fund to be deposited in any nationalised bank; (iii) Section 7 (relating to employment of employees of the Board) was proposed to amend to provide for functional streamlining of such employment; (iv) Section 8 was proposed to be amended to facilitate fixing of rate of contribution by the employer, as may be specified in the scheme; (v) Sub-section (1) of section 16 was proposed to be amended to provide for enhanced punishment for contravention of the provisions of that sub-section; and (vi) The Act achieves the above objects.

(18) The Vice-President's Pension Act, 1997 (30 of 1997): The salary and allowances and other facilities admissible to the Vice-President, being also the Chairman of the Council of States, are governed by the Salary and Allowances of Officers of Parliament Act, 1953. The said Act does not contain any provision for payment of pension to a retired Vice-President. Like the President, who is the Head of the State, the Vice-President who holds a high office is also a high dignitary. It is, therefore, felt that when a retired President is allowed pension and other privileges, it would be proper that a retired Vice-President also gets suitable pension and other privileges, so that after demitting his office he is able to maintain a reasonable standard of life befitting the high office held by him.

(19) The Dock Workers (Regulation of Employment) Inapplicability to Major Ports Act, 1997 (31 of 1997): The cargo-handling operations on board of the vessel are carried out by dock workers and the employment of such workers is regulated by the Dock Workers (Regulation of Employment) Act, 1948 (No. 9 of 1948). The other operations on the shore are carried out by shore workers of the Port Trusts. Out of the eleven major ports in the country, Dock Labour Boards were set up at seven major ports under the said principal Act.

This arrangement of separate cargo-handling labour has led to certain disadvantages like different sets of labour with different service conditions under different statutory bodies, leading to water-tight compartments with no interchangeability. As a result, while one set of labour may be idle, there may be shortage in the another set of labour and vice versa. It has become difficult to have optimum and economical use of available manpower on port. A number of committees were set up by the Department to look into the need for co-ordination of cargo-handling labour in major ports. All the committees recommended integration of cargo-handling labour by a single agency, i.e., Port Trust.

In view of the above, it was proposed that from such date as may be specified by notification, the Central Government shall direct that the provisions of the Dock Workers (Regulation of Employment) Act, 1948 shall cease to have effect in relation to a major port specified in the said notification and on the said date only after a settlement is arrived at between the Dock Labour Board of any major port, its workmen and the management of that major port, in accordance with provisions of the Industrial Disputes Act, 1947.

The act achieves the aforesaid objectives.

(20) The Indira Gandhi National Open University (Amendment) Act, 1997 (32 of 1997): The Indira Gandhi National Open University Act, 1985 was enacted to establish and incorporate an open university at the national level for the introduction and promotion of open university and distance education systems in the educational pattern of the country. During the last few year, IGNOU received a number of offers from countries like the United Arab Emirates (UAE), Mauritius and Seychelles to undertake their academic programmes in those countries. Such programmes are to be conducted by the University through its Study Centres. Such Centres are to be established, maintained or recognised by the University within the existing institution. Sub-section (2) of section 3 of the above-mentioned Act provides that the headquarters of the University shall be at Delhi and it may establish or maintain colleges, Regional Centres and Study Centres at such other places in India as it may deem fit. In view of the limitations stipulated by the aforesaid provision of the Act, it is not possible for the University to extend its programmes abroad. This Act, therefore , amended the said Act suitably so as to enable the University, with the prior approval of the Visitor, to establish Study Centres outside India and conduct its academic programmes through the distance mode in countries outside India.

The Election Commission of India, in February 1997, suggested that the security deposit for elections to the offices of the President and Vice-President might be enhanced.

The Government decided, after considering the suggestion, to enhance the security deposit to rupees fifteen thousand. It also decided to increase the minimum number of proposers and seconders to fifty each in respect of election to the office of the President and twenty each in respect of election to the office of Vice-President.

As Parliament was not in session and the notification for Presidential election was to be issued in June 1997, an Ordinance was promulgated in 1997.

5

INDIAN DEFENCE

Defence

India's defence policy aims at promoting and sustaining durable peace in the subcontinent and equipping the defence forces adequately to safeguard aggression.

The Supreme Command of the armed forces is vested in the President of India. The responsibility for national defence, however, rests with the Cabinet. The Defence Minister is responsible to Parliament for all matters concerning defence. Administrative and operational control of the armed forces is exercised by the Ministry of Defence and the three services headquarters.

Organisation

The three services function under their respective Chiefs of Staff. As on 1 Feb, 2004 the Chiefs of Staff are:

Chief of the Army Staff : General Ved Prakash Malik

Chief of the Naval Staff : Admiral Madhavendra Singh

Chief of the Air Staff : Air Chief Marshal A. Y. Tipnis

Army

At the Army Headquarters in New Delhi, the Chief of the Army Staff is assisted by the Vice-Chief of the Army Staff and seven other Principal Staff Officers, namely, the two Deputy Chiefs of the Army Staff, Adjutant General, Quarter-Master General, Master General of Ordnance, Military Secretary and Engineer-in-Chief.

The Army is organised into five operational Commands, viz., Southern, Eastern, Western, Central and Northern Command and one Training Command. Each Command is under a General Officer Commanding-in-Chief who holds the rank of Lieutenant General. General Officer Commanding-in-Chief commanding an operative command is the commander of demarcated geographical area and has both field and static formations under the command. The major field formations are Corps, Division and Brigade commanded by a General Officer Commanding of the rank of Lieutenant General, a General Officer Commanding of the rank of Major General and Brigadier, respectively. The major static formations are Area, Independent Sub-Area and Sub-Areas. An Area is commanded by a General Officer Commanding of the rank of Major General and an independent Sub-Area and Sub-Area by a Brigadier.

The Army consists of a. number of arms and services. These are Armoured Corps, Regiment of Artillery, Corps of Air Defence Artillery, Army Aviation Corps, Corps of Engineers, Corps of Signals, Mechanised Infantry, Infantry, Army Service Corps, Military Nursing Service, Army Medical Corps, Army Dental Corps, Army Ordnance Corps, Corps of Electrical and Mechanical Engineers, Remount and Veterinary Corps, Military Farms Service, Army Education Corps, Intelligence Corps, Corps of Military Police, Judge Advocate General Department, Army Physical Training Corps, Pioneer Corps, Army Postal Service, Territorial Army, Defence Security Corps. In addition, tile Army has its own Recruiting Organisation, Record Offices, Depots, Boys Establishments and Selection Centres and Training institutions.

Navy

The Navy is responsible for defence and security of India's maritime interests and assets, both in times of war and peace. The

Chief of the Naval Staff at the Naval Headquarters, New Delhi, is assisted by four Principal Staff Officers, namely, the Vice-Chief of Naval Staff, Deputy Chief of Naval Staff, Chief of Personnel and Chief of Material.

The Navy has three commands, i.e., Western, Eastern and Southern, with their headquarters located at Mumbai, Vishakhapatnam and Kochi respectively. Each command is headed by a Flag Officer Commanding-in-Chief in the rank of Vice-Admiral. Western Command and Eastern Command have under them operational fleets, i.e., Western and Eastern Fleets comprising warships, submarines, aircraft and other support ships. Southern Naval Command is responsible for all training activities of the Indian Navy.

The Indian Navy is a well-balanced three-dimensional force consisting of sophisticated missile-capable warships, aircraft carriers, minesweepers, advanced submarines and the latest aircraft in its inventory. Many of the warships are of indigenous design and have been constructed in Indian shipyards. These ships compare well with the ships of similar capability constructed by the advanced countries. The Naval forces are maintained and supported by modern dockyard facilities encompassing state-of-the-art technology. At present, it has two major Naval bases at Mumbai and Vishakhapatnam.

Coast Guard

The Coast Guard came into being on 1 February, 1977 and was constituted as an independent Armed Force of the Union of India with the enactment of CG Act 1978 on 18 August, 1978. The Coast Guard's broad Charter of Duties includes : (a) Safety and protection of offshore installations and artificial islands; (b) Providing protection to fishermen in distress; (c) Protection of maritime environment; (d) Assisting Customs in anti-smuggling operations; (e) Enforcement of MZI Act; and (f) Safety of life and property at sea.

The general superintendence, direction and control of the Coast Guard is exercised by the Director General Coast Guard under Ministry of Defence.

The entire coastline of India and the national maritime zones have been divided into three Coast Guard Regions, namely, Western, Eastern and Andaman and Nicobar Islands, under the respective Commanders of the regions. The Regional Headquarters are located at Mumbai, Chennai and Port Blair.

The Coast Guard Regions are divided into eleven Coast Guard Districts based in our maritime states. There are five District Headquarters on the West Coast, namely Porbandar, Mumbai, Goa, New Mangalore and Kochi. Four on the East Coast, namely Chennai, Vishakhapatnam, Paradip and Haldia and two District headquarters in Andaman and Nicobar Islands, namely, Diglipur and Campbell Bay. In addition, there are Coast Guard stations and Air Enclaves at various locations.

Beginning with two frigates and five Seaward Defence Boats (SDBs), the Coast Guard service has made rapid progress in the last 20 years. The service has now developed into a full-fledged maritime organisation with nine Offshore Patrol Vessels (OPVs), two Advanced Offshore Patrol Vessels (AOPVs), 24 Fast Patrol Vessels (FPVs), 15 Interceptor Boats (IBs) and ICs, 17 Dornier Aircrafts and 15 Chetak Helicopters. The third Advanced Offshore Vessel is expected to be commissioned shortly.

Air Force

The Air Force is organised both on functional and geographical basis. There are five operational commands. These are; Western Air Command, South-Western Air Command, Central Air Command, Eastern Air Command and Southern Air Command. In addition, Maintenance Command and Training Command are two functional commands.

At the Air headquarters in New Delhi, the Chief of the Air Staff is assisted by the Vice-Chief of Air Staff, Deputy Chief of the Air Staff, Air Officer In-charge Personnel, Air Officer–In-charge Administration, Air Officer In-charge Maintenance and Inspector General (Flight Safety and Inspection). Each of these Principal Staff Officers is assisted by Assistant Chiefs of the Air Staff.

Today, the Air Force has an array of modern aircraft on its inventory besides other high-tech electronic and support equipment. The aircraft fleet consists of fighter bombers, air superiority fighters, interceptors, transport and logistic aircraft and helicopters. The fighter force comprises MiG-21 variants, MiG-23s, MiG-25s, MiG-27s and Jaguars which represent the modern generation strike aircrafts. Older generation aircrafts like the Hunters and Canberras are presently used in training and ancillary roles. MiG-299 and Mirage-2000 are air defence aircraft of the present generation. The transport fleet consists of IL-76s, AN-32s, the indigenously produced HS748, Dornier-228 which are manufactured under licence by HAL and Boeing-737 are used for VIP duties. While the IL-76s provides the Air Force with heavy-lift capabilities, AN-32s and HS748s are also used in training role besides performing air maintenance and communication duties. The helicopter fleet consists of Chetak, Cheetah, MI-8s, MI-17s and the heavy lift M1-26. All these aircraft are used for high-altitude operations and provide logistics support to our ground forces. Chetak/Cheetah helicopters manufactured by HAL for the Air Force, are also used in Anti-Tank Guided Missile (ATGM) carriers, air-borne Forward Air Controller (FAC) and for search and rescue operations. Ml-8 Helicopters are specially modified to undertake tasks in Antarctica. In addition, the force has been supplemented with MI -25 and MI-35 attack helicopters. HPT-32 and HJT-16 (Kiran) aircraft, both manufactured by HAL, are used as basic and applied-stage trainers respectively, with the Kiran being supplemented by Polish Iskara aircraft. The first batch of women pilots were commissioned on 17 December 1994. Since then women pilots have been serving in frontline Air Force transport and helicopter squadrons. Women officers are also serving in Technical, Administrative, Logistics, Education and Medical branches. The first batch of women Air Traffic Controller and Fighter Controller/ D ATS was commissioned in May 1996. Thus all branches of the IAF now have women serving.

Commissioned Ranks

The following are the commissioned ranks in the three services; each rank is shown opposite its equivalent in the other service;

Army	*Navy*	*Air Force*
General	Admiral	Air Chief Marshal
Lieutnant General	Vice Admiral	Air Marshal
Major General	Rear Admiral	Air Vice Marshal

Army	*Navy*	*Air Force*
Brigadier	Commodore	Air Commodore
Colonel	Captain Group	Captain
Lieutenant Colonel	Commander	Wing Commander
Major Lieutenant	Commander	Squadron Leader
Captain	Lieutenant	Right Lieutenant
Lieutenant	Sub-Lieutenant	Flying Officer

Recruitment

The Armed Forces symbolise the unity of the country and the ideals of national integration. Recruitment to the Armed Forces is open to all Indian nationals, irrespective of caste, creed, community, religion and region. The endeavour has been to provide free and equal opportunities to all sections of the population to join the Armed Forces and render service in accordance with the ideals of secularism, democracy and social justice. India's Armed Forces offer challenging openings to our youth.

A remarkable feature of recruitment to the Armed Forces is that it is entirely voluntary. The competition for entry into the service is intense, reflective of the increasing numbers of educated youth in the country, coupled with the attractive terms and conditions of service, and the high level of respect commanded by the Armed Forces. Recruitment is made from different states/Union Territories on the basis of their recruitable male population. Conscious efforts are made to take care of the special needs of the border areas and hilly and other remote areas, by lowering educational and certain other criteria to suit their requirements.

Induction of Women into the Armed Forces

Provision has all along existed for women to join the Armed Forces Medical Services, the Armed Forces Dental Services and the Military Nursing Service, Section 12 of the Army Act provided that women would not normally be eligible for enrolment in the Army. Similar provisions also existed in the cases of the Air Force and the Navy. However, in acknowledgement of the changing times, the Government has approved the induction of women into selected non-combatant branches in the three Forces. The entry of women has, however, been restricted to the officer cadres, and they are on Short Service Commission basis. Further continuance of schemes would be decided on the basis of the experience gained. In pursuance of this decision, several women officers have since joined the Service, in the EME, Signals, Engineers, Army Education Corps, Army Ordnance Corps, Army Service Corps and in the Judge Advocate General Department.

The response to this entry was encouraging and the courses were almost fully subscribed. Therefore, the existing planned intake of 50 officers per annum has been increased to 100 per annum. In addition, the Government has also approved grant of ante-date seniority to those women officers who possess a technical qualification. Till date, 219 women officers have been commissioned in various Arms/Services.

Recruitment of Commissioned Officers

Entry into the officer cadres in the Armed Forces is primarily through the Union Public Service Commission (UPSC). Graduates are eligible to join the Armed Forces through an examination known as the Combined Defence Services Examination (CDSE) conducted by the UPSC twice a year. Candidates who qualify in the examination join the Indian Military Academy (IMA), the Air Force Academy, and the Naval Academy for pre-commission training. Individuals selected for Short Service Commission are trained at the Officers Training Academy.

The candidates seeking a career in the Armed Forces after completion of 10+2 general education join the National Defence Academy (NDA). UPSC holds an entrance examination twice a year for entry in the NDA. Candidates who qualify in this examination join the respective Service Academies, viz., the Indian Military Academy (IMA) for the Army, the Air Force Academy for the Air Force and the Naval Academy for the Navy, for their pre-commission training.

There is also direct entry of officers through the Service Selection Boards (SSBs) for the Army and Navy, and through the Air Force Selection Board for the Air Force, without any written examination by the UPSC. Candidates in the age-group of 20 to 27 years with Engineering Degree and Post-Graduates in specified subjects in the age-group of 23 to 27 years are eligible for interview by the respective Selection Boards of branches of the Armed Forces.

In July 1992, the Government approved a University Entry Scheme, initially for a period of three years, for induction of engineering students in their final year/pre-final year into the Army. This scheme is already operating in the Air Force and the Navy. Engineering students of various disciplines studying in the final/pre-final years in recognised universities/institutions are eligible for induction into the technical branches/services of the Army as short-service commissioned officers with the rank of 2nd Lieutenants (now Lieutenants) under this scheme. Their salary, however, is paid in one lump-sum on their joining the IMA for training, on the successful completion of which they will be granted permanent commission in the Army. An intake of 100 officers per year has been planned under this scheme.

In order to mitigate the shortage of Technical Officers (Engineering) in the Army, the Government also approved a Short Service Commission (Tech) Entry scheme. This envisages recruitment of qualified technical graduates through the SSBs and their enrolment in the Officers Training Academy (OTA), Chennai after medical tests for a ten-month course. At the end of the course, the successful candidates will receive Short Service Commission. Thereafter, they will be governed by the Rules applicable to the other short-service commissioned officers.

Recruitment of medical officers in the Armed Forces is done through two sources. All MBBS graduates passing from the Armed Forces Medical College, Pune, are granted Permanent Commission. Apart from this, post graduates/MBBS degree-holders passing from civilian medical colleges are selected through competitive examinations, on an all-India basis, conducted by the Directorate General of Armed Forces Medical College, Pune, partly for grant of Regular Commission and partly for grant of Short Service Commission.

The Government has already approved a scheme of induction of NCC 'C' certificate holders to SSC(NT) stream only, through SSB interview without passing UPSC (CDS) examination. This scheme will help in improving the intake in this entry.

A special Commissioned Officers, entry scheme has been introduced in the Army. Under this entry serving JCOs/NCOs/ORs in the age-group of 30-35 years, with an Army Senior School Certificate Pass (Class XI CBSE pattern) qualification, will be eligible for commission after screening/selection through SSB and a Medical Board. The officers so commissioned will earn promotion up to the rank of Colonel. The officers will be employed in unit as platoon commanders/sub-unit commanders or equivalent/QM job/ERE appointments, etc., up to the rank of Major. They will retire at the age of 55 years, after serving for about 20-25 years as officers, The scheme will not only improve the career prospects of existing JCOs/NCOs/ORs but also help in making up for the deficiency of officers in the Army.

Recruitment of Other Ranks in Army and In Navy

There are 12 Zonal Recruiting Offices (ZROs) and 58 Branch Recruiting Offices (BROs) spread throughout the country. In addition, there is an Independent Recruiting Office (IRO) at Delhi. In order to inform the potential candidates of the ommencement of recruitment well in advance, extensive recruitment publicity is undertaken throughout the country, including in remote areas.

Recruitment rules provide for relaxation in respect of educational and physical standards to the candidates from certain specified backward, remote and tribal regions to give them due representation in the Army. Special physical standards for certain classes/regiments/tribes and categories have been laid down. Besides, relaxation in physical qualifications is being provided to certain categories of candidates like those between 16 to 18 years of age-group, national/state-level sportsmen and one son in the case of every serving soldier, ex-serviceman and war widow.

Airmen

Recruitment of Airmen to the Indian Air Force is done through the Central Airmen Selection Board located at the Air Force Station, New Delhi. There are 13 Selection Centres under this Board and they make the necessary arrangements for the conduct of selection tests and the final enrolment. A Pilot Project has been undertaken for the direct recruitment of trained manpower from the civil stream in the trades, such as clerks, drivers, and Surveyor Automated Cartography. Besides direct recruitment of technically qualified civilian personnel as JCO (catering) has been introduced.

Territorial Army

The Territorial Army is a voluntary part-time civilian force which plays a useful role in the defence of the country. It was raised in 1949 and since its inception, has rendered valuable service to the nation. The territorial army consists of departmental and non-departmental TA units. The departmental TA units are raised from amongst the employees of Government departments and public-sector undertakings. There are at present 27 departmental and 25 non-departmental TA units. The five ecological battalions are also part of the departmental TA units.

As a result of internal disturbances and terrorist activities in Punjab, Jammu and Kashmir and other states and the prevailing conditions along our northern, eastern and western borders, the TA has of late been called upon to play an active role in assisting the local Army formations in these areas. As a result of these demands, all the 25 infantry battalions (TA) have been embodied since 1990-91, for varying periods.

The five ecological battalions of TA (called Eco Task Forces) have continued their excellent work of environmental upgradation of the degraded areas in Rajasthan, Madhya Pradesh, Uttar Pradesh and Jammu and Kashmir. In consultation with the Ministry of Environment and Forests several steps aimed at reducing the cost of these Eco Task Forces, without actually lowering their output or efficiency, have been taken up. A proposal to reorganise 16 infantry battallions (TA) initiated by the TA Directorate has been approved by the Ministry of Defence.

National Cadet Crops (NCC)

The National Cadet Corps (NCC) established on 15 July, 1948 has emerged as the single largest structured youth movement in India. It has 11.6 lakh boys and girls in the Senior and Junior

Divisions in the Army, Navy and Air Force Wings. This strength covers four per cent of the eligible student population in the country. Director General, NCC located at New Delhi controls and oversees various activities of the NCC through 16 NCC Directorates spread across the country. There is a Central Advisory Committee for the NCC to provide overall policy guidelines. NCC is manned by the service personnel, whole time NCC officers, teachers/ professors and civilians. One lecturer/ teacher in each educational institution is appointed Associate NCC officer.

The NCC whose motto is 'Unity and Discipline' has the following aims: (a) To develop qualities of character, courage, comradeship, leadership, secular outlook, spirit of adventure and sportsmanship and the ideal of selfless service among the youth to make them useful citizens; (b) To create a human resource of organised, trained and motivated youth to provide leadership in all walks of life including the Armed Forces and to be always available for the service of the nation.

During 1997-98, 17 Centrally organised camps were held. Forty National Integration Camps were conducted across the country in which nearly 49,885 cadets participated. A total of 4,99,677 cadets attended Annual Training Camps during 1997. The NCC has an ongoing youth exchange programme with Canada, Singapore, U.K., Bangladesh and Sri Lanka. A team of three officers and 24 cadets (12 boys and 12 girls) went to Canada; eight NCC cadets (four boys and four girls) visited United Kingdom; one officer and four NCC cadets (two girls and two boys) to Air Wing attended the NCC Air Wing programme at Singapore; one officer and two cadets (one boy and one girl) visited Australia for the first time to attend the youth exchange programme and one officer and four NCC cadets (two boys and two girls) participated in the Naval programme of Singapore and a team of two NCC cadets (one boy and one girl) went to Sri Lanka.

TRAINING INSTITUTES

Sainik Schools

The scheme to establish Sainik Schools was started in 1961 to broadbase the recruitment to the officers cadre of the Defence Forces.

Sainik Schools are joint venture of the Central and state governments. At present 18 Sainik Schools, one each in all major states are managed by the Sainik Schools Society. Boys from a state which does not have a Sainik School of its own are admitted to schools located in adjoining states. Sainik Schools are fully residential and admit students in classes VI and IX strictly in order of merit obtained in the All India Sainik School Entrance Examination held in February each year. These schools are affiliated to the Central Board of Secondary Education and follow the 10+2 pattern, in science stream.

The pass percentage of Sainik School students in the class X and XII CBSE examinations during the academic session 1996-97 was 98.6 per cent and 86.7 per cent respectively. Students from 110 Sainik Schools joined the NDA in 1997. So far 4,901 students from the Sainik Schools have joined the NDA. The tuition fee has been raised to Rs. 14,000 per annum from academic session 1997-98.

National Defence Academy (NDA)

The National Defence Academy (NDA), Khadakwasla, is a joint services institution for training young cadets as future officers of the Defence Services. The motto of the Academy is Sewa Paramo Dharma (Service Before Self). As part of their training, cadets are provided academic inputs. The syllabus of the Academy has been approved by the Jawaharlal Nehru University for the grant of BA/B.Sc. degree at the time of passing from the Academy. As on date, the strength of cadets is 1,870. This includes 71 cadets from Bhutan.

Indian Military Academy (IMA)

The Indian Military Academy (IMA), Dehradun, established in 1932 caters to the training of cadets for commission into the Army. The training enables the Gentlemen Cadets to develop intellectual, moral and physical qualities through basic military training and broad academic education; qualities of dynamism, initiative and understanding which form the very basis of leadership, in war as well as in peace. The motto of the Academy is Veerta Aur Vivek (Valour and Wisdom). The present strength of the IMA is 1,207 Gentlemen Cadets which includes 23 Gentlemen Cadets from friendly countries. Army Cadet College is a wing of IMA which caters to training of service cadets selected for commission. The academic format is similar to the NDA on the lines of 10+2+3 and the syllabus is common. On completion of the course these cadets also qualify for a BA/B.Sc degree, recognised by the Jawaharlal Nehru University.

Officer's Training Academy (OTA)

The Officers' Training Academy, (OTA) Chennai, imparts pre-commission training for the following courses: (a) Short Service Commission Course of 44-weeks for university graduates who qualify in the Union Public Service Commission; (b) course of six months for lady cadets (Women Special Entry Scheme); and (c) Permanent Commission on Special List (PCSL) to selected service candidates, who qualify after a training of four weeks. Authorised training strength of the Academy is 500. So far 297 lady cadets have been granted Short Service Commission.

Rashtriya Indian Military College

Education on public-school lines is imparted at the Rashtriya Indian Military College, Dehradun, principally for the boys who subsequently desire to join the NDA with a view to obtaining a commission in the Armed Forces. The College admits students in class VIII through a written examination-cum-viva voce test conducted under the aegis of the state governments throughout India twice every year in February and August. The college has the distinction of having had on its rolls three Chiefs of Army Staff and a Chief of Air Staff.

National Defence College (NDC)

The National Defence College (NDC) was founded in 1960 to prepare senior Defence and Civil Service officers for a comprehensive understanding of major problems of national security and strategy. The aim of the NDC course is to equip future planning of national strategy in the context of world polity. Commandant NDC and Senior Directing Staff (Foreign Services) participated in the Asia Regional Forum (ARF) Meeting of the heads of National Defence Colleges/ Institutions held in Manila in September 1997. The Prime Minister addressed the participants of 37th NDC Course on 'India's Role in a Changing World'.

Army Cadet College

Army Cadet College is a wing of IMA which caters to the training of service cadets selected for commission. The academic format is similar to the NDA on the lines of 10+2+3, and the syllabus is common. On completion of the course these cadets also qualify for a BA/B.Sc. degree recognised by the Jawaharlal Nehru University.

Army School of Physical Training (ASPT)

Army School of Physical Training (ASPT), Pune, established in 1947 is the cradle of physical and recreational training in the Army. It has training infrastructure to impart systematic and comprehensive instructions on physical training. Selected candidates from all ranks of the Army, students from the police, para-military forces and friendly foreign countries attend various courses on physical training and allied subjects at ASPT.

Other Training Centres and Schools

The College of Combat, Mhow, conducts the higher command, senior command and junior command courses for Army Officers. It also conducts a Combined Operational Review and Evaluation (CORE) programme for selected senior officers of the rank of Major General and equivalent of the three Services once every year. College of Military Engineering, Kirkee (Pune), imparts training to the officers and other ranks in all aspects of military engineering. Long courses of over two years, duration are also conducted to train officers up to degree standards. The Military College of Telecommunication Engineering, Mhow imparts basic and advanced technical training in telecommunications and signal tactics. The Armoured Corps Centre and School, Ahmednagar, conducts training in tactical handling of armoured fighting vehicles, driving and maintenance. The School of Artillery, Deolali, provides training in field branch artillery. The Air Defence Guided Missiles School at Gopalpur-on-sea trains personnel of the Air Defence Artillery. The High Altitude Warfare School located at Gulmarg and Sonmarg trains personnel in the art of mountain warfare including rock, snow and ice-craft. The Counter Insurgency and General Warfare School, Vairengate, trains officers and men in the art of combating insurgency.

The Mechanised Infantry Regimental Centre conducts basic and technical training for recruits of mechanised infantry. In addition, it runs basic and instructor courses on anti-tank guided missiles for officers, JCOs and other ranks of mechanised infantry. It also carries out conversion training of units when they are converted to mechanised infantry or when change in equipment is involved. The College of Materials Management, Jabalpur, imparts specialised training in materials management including ammunition and explosives and also in contemporary materials management techniques. Some of the other Army training centres and schools are Army Service Corps School, Bareilly; EME School, Vadodara; Military College of Electronics and Mechanical Engineering, Secunderabad; College of Defence Management, Secunderabad; Remount and Veterinary Corps Centre and School, Meerut; Army Education Corps Training College and Centre, Pachmari; Army School of Physical Training, Pune; Army/ Air Transport School, Agra; Military Intelligence Training School and Depot, Pune; Army School of Mechanical Transport, Bangalore; Corps of Military Police Centre and School, Bangalore; Institute of Military Law, Kamptee; Armed Forces Medical College, Pune; Institute of National Integration, Pune and Army Medical Corps Centre and School, Lucknow.

Production and Supplies

Department of Defence Production and Department of Defence Supplies were merged in December 1984 to constitute the present Department of Defence Production and Supplies. The primary role of the Department is to equip the armed forces of the country with the latest equipment and weaponry systems and to contribute to modernisation of armed forces. This task is being undertaken through 39 ordnance factories and 8 defence public-sector undertakings.

Ordnance Factories

The Ordnance Factory Organisation is the largest departmental undertaking engaged primarily in the production of defence hardware for the armed forces and paramilitary/police. At present 39 ordnance factories with a manpower of 1.48 lakh spread all over India operate a wide range of discipline and technologies and supply critical lethal as well as non-lethal stores to defence forces. Some of the important products are field guns, anti-aircraft guns, mortars, various small arms and ammunition for weapons and guns, rockets, projectiles, pyro-technics, bombs, grenades, mines, demolition charges, depth charges, infantry combat vehicles, battle tanks, transport trucks and patrol vehicles, high-altitude and combat clothing, optical and fire control instruments, engineering equipment, supply dropping equipment including parachutes, rubberised items, various knitted and woolen items like blankets, web equipment and a wide range of general stores. The OFB's bulk production today is 54.56mm. Indian small armed system besides meeting the requirement of the army produces a range of products for the Air Force and Navy including Air-dropped bombs for Air Force. Liquid Fuel required for successful flight trials of Prithvi and Agni missiles, igniters and copper liners for the warheads are also supplied during development/production of Prithvi missile.

The production of Ajeya tank (T-72) and Sarath (BMP-II), Infantry combat vehicles are carried out at Heavy Vehicle Factory, Avadi and Ordnance Factory, Medak, respectively. A sophisticated opto-electronic production unit has been set up at Dehradun to produce the opto-electronic fire control and night vision devices required for Ajeya tank (T-72-MI) and Sarath vehicle (BMP-II).

Productionisation of Main Battle Tank (MBT) Arjun, which has now been accepted by the Army is also being taken up. To meet the Army's requirement of high calibre ammunition, a new Ordnance Factory is being set up in Bolangir District of Orissa. The state-of-the-art plants are expected to be commissioned in the current year.

As part of diversification efforts, Vehicles Factory, Jabalpur (VFJ), has taken up modification and upgradation of the Jonga to cater to the civilian market, besides introduction of new generation transport vehicles for armed forces under technology collaboration.

Defence Undertaking

The Defence Public Sector Undertakings (DPSUs) were structured with a flexible form of operation, decentralised management and adequate operational autonomy so as to utilise the defence technological base to a wide and diversified range of applications, in addition to the basic task of catering to the needs of the armed forces.

Eight public-sector undertakings (PSUs) currently function under the Department of Defence Production and Supplies. These are Hindustan Aeronautics Limited (HAL), Bharat Electronics Limited (BEL), Bharat Earth Movers Limited (BEML), Mazgaon Dock Limited (MDL), Garden Reach Ship-builders and Engineers Limited (GRSE), Goa Shipyard Limited (GSL), Bharat Dynamics Limited (BDL) and Mishra Dhatu Nigam Limited (MIDHANI). The value of production of the Defence PSUs during 1997-98 has been of the order of Rs 6,327 crore as against Rs 5,599 crore in 1996-97. The average value of sales by these PSUs during the last 5 years is Rs 5,017.8 crore.

Hindustan Aeronautics Limited (HAL) was set up in 1964 with its corporate office at Bangalore. The company has 13 divisions located in six states. The principal functions of the company are to design, manufacture, repair and overhaul various types of aircraft helicopters and related aero-engines, avionics, instruments and accessories. HAL is currently manufacturing Jaguan Dornier-228 and MiG-27M aircraft, Cheetah and Chetak helicopters and various types of aero-engines. HAL is also engaged in the design and development of an Advanced Light Helicopter (ALH). All divisions of HAL have obtained tine ISO 9001 /9000 certificate by the International Accreditation and Quality Agencies.

The Bharat Electronics Limited (BEL) was established in 1954. It is the country's premier electronics organisation, having nine manufacturing units located at Bangalore, Chennai, Hyderabad, Machilipatnam, Pune, Taloja, Panchkula, Ghaziabad and Kotdwara. Its corporate office is at Bangalore. BEL is engaged in the design, development and manufacture of sophisticated state-of-the-art electronic equipments for the use of defence services and para-military organisations. Other users are All India Radio, Doordarshan, Department of Telecommunications, Police, Meteorological Department, etc. It has a very wide range of over 350 products, comprising communication equipment, radars for military and civil use, optical and opto-electronic equipments, sound and vision broadcasting equipment and electronic components. All the manufacturing divisions of BEL are equipped with the most advanced test and measurement and quality-control facilities for NIL grade/International civilian standards. ISO 9002 accreditation has been achieved by almost all the manufacturing units of BEL.

Bharat Earth Movers Limited (BEML) was incorporated as a DPSU in May 1964 and commenced its operations in January 1965. It has three modern production units at Bangalore, Kolar Gold Fields and Mysore. Besides, a subsidiary unit, Vigyan Industries Limited (VIL) in Tarikere (Karnataka), has been established by taking over an existing venture of the state government. Its corporate office is at Bangalore. The company is presently engaged in the design, development and manufacture of a wide range of sophisticated equipments and systems, particularly earth-moving machines, rail coaches, track-laying equipments, heavy-duty trucks, trailers, diesel engines, etc. BEML is a leader in the earth-moving industry with over 70 per cent market share. Its equipments and systems are productively deployed in India and over 30 other countries across the globe. The company has acquired ISO 9000 certificate.

Mazgaon Dock Limited (MDL) is the country's leading shipbuilding yard and can build warships up to 6,000 DWT displacement and merchant ships up to 27,000 DWT. It has units at Bombay, Nhava and Mangalore and headquarters at Bombay. Its major activities include construction of submarines, missile-boats and destroyers, etc.,for the Indian Navy and off-shore-supply vessels and well-head platforms, etc., for the Oil and Natural Gas Commission (ONGC). The company also provides diving services as well as services for coating/laying sub-sea pipes.

Garden Reach Shipbuilders and Engineers Limited (GRSE) was established in 1884 as a small ship-repair workshop. It was taken over by the Government of India in the early 1960. It is a multi-unit shipyard-cum-general engineering company. It has six units in and around Calcutta and a Diesel Engine Plant at Ranchi (Bihar). Its corporate office is at Calcutta. It has three distinct divisions, namely, ship, engineering and engine divisions. It is presently engaged in the construction of warships and auxiliary vessels of various types for the Navy and Coast Guard to undertake repair of vessels of these two organisations.

The activities of Goa Shipyards Limited (GSL) located at Vasco da Gama, primarily comprise construction and repair/refit of ships/vessels. It has undertaken construction/refit of variety of vessels for the Indian Navy and the Coast Guard as well as for the non-defence sector. It is currently building advanced off-shore patrol vessels of in-house design.

Bharat Dynamics Limited (BDL), Hyderabad, was established in 1970 to manufacture guided missiles. It has two units at Kanchanbagh and Bhanoor. It is also the prime production agency for missile weaponry systems. The company utilising the spare capacity available has diversified into small arms production to meet the requirement of para-military forces of the country.

Mishra Datu Nigam Limited (MIDHANI) located at Hyderabad was incorporated in 1973. MIDHANI's product range includes super alloys, maraging steels, heat-resistance alloys, controlled expansion alloys, tungsten, molybdenum, etc., in a variety of all mill forms to serve the strategic needs of the country including, defence, atomic i energy, spare aeronautics with a view to attaining self-reliance in this sophisticated field. The company has obtained ISO 9002 certificate for the entire plant.

RESEARCH AND DEVELOPMENT

The Defence Research and Development Organisation (DRDO) was established in 1958 by amalgamating Defence Science Organisation and some of the Technical Development Establishments. A separate Department of Defence Research and Development was formed in 1980 which operates through a network of 50 laboratories/establishments. The department is engaged in the pursuit of self-reliance in critical technologies of relevance to national security. It formulates and executes programmes of scientific research, design and development leading to induction of state-of-the-art weapons, platforms and other equipments required by the Armed Forces. It functions under the control of Scientific Adviser to Defence Minister who is also Secretary, Defence Research and Development.

The major achievements towards indigenous development of defence weapons and systems are: (a) development leading to production of surface-to-surface missile, Prithvi; (b) state-of-the-art main battle tank, Arjun; (c) flight simulators for aircraft; (d) pilotless target aircraft, Lakshya; (e) parallel super-computer pace plus; and (f) small arms and ammunition.

The DRDO has acquired world class core competence in the area of Guided Missiles, Super Computer, UAV, armaments and ammunition including illuminating ammunition, night vision devices, secured communication, military bridging systems and fire detection and suppression systems. India is now self-reliant in armours, armaments, super computers and missile systems. The DRDO has launched a 10-year national mission for enhancing self-reliance in Defence Systems with the goal of increasing the indigenous content in the annual defence acquisition from the level of 30 per cent in the year 1995 to 70 per cent by the year 2005. It has also accorded high priority for development of systems in critical areas of technologies which have been denied by advance countries or which are likely to be denied in the future. The weapons and ammunition developed by the Organisation and produced by production agencies include Indian field gun, INSAS rifle, LMG 5.56 mm, charge line mine-clearing for safe passage of vehicles in the battlefield, illuminating ammunition for enhancing night field-fighting capability, cluster weapon system for fighter aircraft, new generation bombs for high-speed aircraft, naval mines and 105 mm FSAPDS, 105 mm and 125 mm FSAPDS ammunition. Multibarrel rocket system Pinaka is undergoing user trial. In the area of Electronics and Instrumentation, the significant developments are low-level tracking radar Indra I,Indra II for Army and Air Force, light-weight field artillery radar, battle-field surveillance radar, secondary surveillance radar, avalanche victim detector, tidex, EW systems, night vision devices and secured telephone SECTEL. Installation and commissioning of facilities and equipment for fabrication of Galleum Arsenide Wafers at GAETEC and artillery combat command and control systems. Some of the development successes in the area of engineering systems are bridge layer tank Kartik, military bridging systems, various types of shelters, crash fire-tenders, rapid intervention vehicle and state-of-the-art fire-detection and suppression system for tanks, naval ships, missile launchers and barbette areas.

In the area of naval systems and materials the organisation has developed an advanced ship sonar system, the marine accoustic research ship Sagardhwani, under-water anti-fouling paints, torpedoes, naval simulators and jackal steels. The submarine sonar and weapon control system Panchendriya is getting ready for harbour/sea trials. The indigenous light combat aircraft (LCA) is getting ready for maiden flight trials by 1998. The advanced technology aero engine Kaveri of LCA is undergoing multi test-bed trials. The Kaveri engine has been successfully tested for about 500 hours on multiple test beds. The remotely-piloted vehicle Falcon has successfully undergone 25 developmental flight trials and is getting ready for user trials. The Integrated Guided Missile Development Programme (IGMDP) comprises four missile systems, Prithvi, surface-to-surface tactical battle field missile; Akash, medium-range surface-to-air missile; Trishul, short-range surface-to-air missile; and Nag, third-generation anti-tank-missile. Trishul is getting ready for user trials. Akash and Nag are in advanced stages of development. The programme also included successful development of re-entry technology demonstrator under project Agni.

The Department has developed, preserved and convenience foods for the Armed Forces. State-of-the-art technologies developed for missile programme LCA and other high technology systems are being channelised to make available to the common man bio-medical equipment at a fraction of the prevailing price of imported systems. A society of bio-medical technology has been formed for this purpose. Extra light-weight floor reaction orthosis (FROs) for polio-handicapped persons, cardiac stress analyser, cardiac paqemaker and cytoscan for early detection of cancer cells have been developed and the technology has been transferred to industry. In addition to the above, the Department has been rendering many services to the Armed Forces.

Resetlement and Welfare and Ex-Welfare Servicemen

In order to maintain the youthful profile of the Armed Forces, over 55,000 service personnel are retired/released every year at a comparatively young age. As per statistics a total of 13.55 lakh ex-servicemen and 2.43 lakh widows have been registered with them and were reported to be surviving as on 31 December 1996. The Directorate General of Resettlement (DGR) under the Ministry of Defence (MOD) has been set up to look after all matters connected with resettlement and welfare of ex-servicemen and their dependents. A Kendriya Sainik Board under the Chairmanship of Defence Minister has been established for laying down the general policy for the welfare of ex-servicemen and their dependents for the administration of Welfare Funds, and also for coordinating the work of the Sainik Boards in the country. At the state level, the Rajya Sainik Boards, and at the District level the Zila Sainik Boards, have been established. The Government of India bears 50 per cent of the expenditure incurred on the organisations of Rajya and Zila Sainik Boards, the remaining expenditure being borne by the respective state governments.

Resettlement

Resettlement activities for the retired/retiring service personnel consist of the following:

(a) Training programmes to reorient retiring Defence personnel towards civil employment;
(b) Providing re-employment opportunities in Government/semi-Government/public sector organisations; and
(c) Schemes for self-employment.

Training

For retiring service officers the following training programmes were introduced during the year 1996-97: (a) Diploma in Industrial Security and Labour Laws;(b) Coaching for Airline Transport Pilot Licence/Senior Commercial Pilot Licence/ Commercial Helicopter Pilot Licence; (c) Consultant in ISO-9000; (d) Quality Assurance Manager ISO-9000; (e) Deputy Quality Assurance Manager ISO-9000; (O Consultancy as a career; (g) Equity and Portfolio Management; (h) LAN Engineering; and (i) POXPRO Oracle. During the training year 1996-97, 1,145 officers were trained. The vocational training, ITI training and on-the-job training are presently being conducted for retiring Service personnel other than officers.

Re-Employment

Re-employment constitutes a major means of rehabilitation or resettlement of ex-servicemen. To achieve this goal both the Central and state governments have provided various concessions/facilities. These include reservation of posts, relaxations in age/educational standards, priority in employment, etc. The Central Government has reserved 10 per cent of Group 'C' and 20 per cent of Group 'D' posts for ex-servicemen in Central ministries and departments. The percentage of reservation in public-sector undertakings and nationalised banks in these categories are 14.5 and 24.5 per cent respectively. Besides, there is 10 per cent reservation for the post of Assistant Commandant in paramilitary Forces. Reservations under the state governments vary from two per cent to 20 per cent. There is no reservation for ex-servicemen in Bihar, Kerala and Meghalaya.

DGR has been nominating ex-servicemen security agencies to various PSUs and private-sector organisations. These security agencies provide employment opportunities for officers and other ranks. There are over 300 ex-servicemen security agencies which are registered with DRG, of which 130 have been sponsored for work. This alone has generated employment opportunities for over 7,000 ex-servicemen and over 400 officers. There is considerable scope for absorption of ex-servicemen in para-military forces like CRPF, BSF, ITBP, CISF.

The concept of Ecological Tàsk Force was mooted in 1992 for the purpose of restoring the forest cover in regions where significant deforestation had taken place. These units were initially raised in three states, namely, Uttar Pradesh, Rajasthan and Jammu and Kashmir. The task forces are manned by ex-servicemen who are paid salaries as per Territorial Army scales. Every individual, irrespective of his rank prior to retirement, is re-employed as a sepoy. The Ministry of Defence provides officers to command these units.

Schemes for Self-Employment

Important schemes for self-employment for ex-servicemen are SEMFEX-I, SEMFEX-II and SEMFEX-III. These schemes have been launched in collaboration with the Small Industries Development Bank of India, NABARD and the Khadi and Village Industries Commission for providing extensive self-employment opportunities for ex-servicemen and their dependents.

Under SEMFEX-I Scheme launched in April 1987 financial assistance is provided to ex-servicemen to set up small industrial projects for self-employment. Loans under this Scheme are provided by the respective State Financial Corporation. As on 31 December 1996 there were 6,697 beneficiaries and the amount sanctioned was to the tune of Rs 179.48 crore since inception.

The SEMFEX-II Scheme was launched in January 1988 by the DGR in collaboration with the National Bank for Agricultural and Rural Development (NABARD) to provide assistance for agricultural and allied activities. Under the Scheme, financial assistance up to Rs 10 lakh for setting up of industrial units/service establishments is given. The ceiling of Rs 10 lakh is, however, not applicable for setting up of units relating to agro-industries and non-agro industries and they can be supported up to SSI limit under non-farm sector activities. However, all agro and food processing units including processing of forest produce will be assisted without any ceiling on the project cost. Eligible borrowers may also be financed for acquisition of a maximum of two transport vehicles. Interest-free soft loan assistance for all schemes under non farm sector as also the innovative hi-tech projects, export-oriented units and agro-processing projects are covered under the farm sector. Since inception and up to December 1996 loans amounting to Rs 2,057.82 crore have been sanctioned to 3,550 beneficiaries.

The SEMFEX-III Scheme was launched in October 1991 in collaboration with the Khadi and Village Industries Comrnission (KVIC) but was implemented from 1992-93. It provides self-employment opportunities for setting up village industries in the purview of KVIC. Under this Scheme, ex-servicemen and their widows are eligible to take up self-employment ventures. Financial assistance for such ventures is provided under a liberalised pattern of assistance by the KVIC. Margin money requirement is only five per cent of the project cost. The project proposals up to Rs 25 lakh will be financed under the scheme. Grant up to 30 per cent will be provided for the project cost up to Rs 10 lakh and 10 per cent for the remaining cost of the project. The KVIC has earmarked 10 per cent of the states allocated budget under the Scheme. The loan granted to village industries under this Scheme carries an annual rate of interest of 17 per cent and 4 per cent on loan for Khadi units. The Scheme is picking up. Up to December 1996, a loan of Rs 295.33 lakh was sanctioned to 467 beneficiaries.

Welfare

Kendriya Sainik Board (KSB) is responsible for progress in the various welfare benefits and concessions provided by Central and state governments to ex-servicemen, war widows, disabled ex-servicemen and dependents. The undermentioned concessions and facilities are available to eligible personnel: (i) Re-possession of land/house owned by ex-Servicemen which they had rented out during their service career; (ii) Children of Defence personnel killed or disabled in action or disabled, who are studying in educational institutions under the Department 'of Education of both Central and state governments, are entitled to total exemption from tuition fee and other fees levied by the institutions. Grants are provided to meet hostel charges towards cost of books, stationery and uniform where it is compulsory; (iii) 25 seats in the MBBS, one seat in BDS and two seats in Engineering are available through KSB for wives/widows and wards of those servicemen killed in action, disabled in action and boarded out from service, died while in service with death attributable to Military service, died while in service and boarded out with disability, attributable to service and Gallantry Award winners; (iv) 25 per cent seats are reserved for the wards of serving and ex-service personnel in Sainik Schools; (v) States/UTs have made reservation of seats in professional colleges/ITI/polytechnics for wards of serving and retired Defence personnel; (vi) A grant of Rs 600 p.m. per student is provided to wards of war-bereaved, disabled and attributable peace-time casualties housed in 35 War Memorial Hostels, to enable them to pursue their studies; (vii) Ex-servicemen, their families and families of deceased service personnel drawing pension of any kind are entitled to free out-patient treatment in Military hospitals subject to certain conditions. In addition to the existing Military Hospitals, 24 MI Rooms and 12 Dental Centres have been specially created from the funds provided by the Services and KSB for providing medical facilities to ex-servicemen pensioners and their dependents. Ex-servicemen suffering form serious diseases are provided 60 per cent reimbursement of the total expenditure for treatment in Civil Hospitals in case they have not been provided assistance from other sources. Assistance for Dialysis is restricted to Rs 75,000 only; (viii) 75 per cent concession in rail fare for travel in II Class is available to war-widows including those of IPKF casualties, on production of I Card issued by KSB. In addition, Government of India has announced free travel for recipients of Gallantry Award (Chakra Series only) in First Class/II AC throughout the country. The passes are issued by the office of the divisional Railway Manager. 50 per cent concession in fare for air travel in domestic flights of the Indian Airlines, is available to the recipients of Param Vir Chakra, Maha Vir Chakra, Ashok Chakra and Kirti Chakra and permanently disabled officers who have been invalidated out of service, and dependent members of their families; (ix) Financial assistance form Raksha Mantri's Discretionary Fund (RMDF) is provided to ex-servicemen and widows of ex-servicemen in penury, for marriage of daughters, education of children, repair of house and medical assistance; (x) The majority of States have made reservations for serving/retired Armed forces personnel in allotment of house sites/houses; (xi) Financial assistance is provided to war-widows/war-disabled for repair of houses on 50 per cent cost sharing basis with state governments up to a maximum of Rs 10,000; (xii) Over 252 Sainik Rest-Houses have been created in the country which provide transit facilities to ex-servicemen and dependents at nominal rates; and (xiii) The states/UTs provide Cash Award/ Annuity/Cash in lieu of land for Gallantry/Non-Gallantry Award Winners.

Armed Forces Flag Day Fund

Before April 1993 there were four separate funds, namely, Amalgamated Special Fund for War-Bereaved, War-Disabled and other ex-Servicemen/serving personnel, (ii) Flag Day Fund, (iii) St. Dunstan's (India) and KSB Fund, and (iv) Indian Gorkha Ex-servicemen's Welfare Fund. These separate funds have been merged into an Armed Forces Flag Day Fund.

A number of welfare schemes are funded from the Armed Forces Flag Day Fund administered by the Kendriya Sainik Board. The fund has a corpus of Rs 54.73 crore as on 31 March 1997, and the interest earned on the investment of the corpus is utilised for various welfare activities/schemes approved by the Managing Committee of the Fund. Financial assistance is also provided to institutions such as Military Hospitals, Paraplegic Homes at Kirkee and Mohali, Red Cross Society, Cheshire Homes, St. Dunstans After Care Organisation (for the blind).

Concessions to Ex-Servicemen

The concessions provided to the ex-servicemen inter alia include: (a) Free education for children of Armed Forces personnel killed or disabled in action; (b) Reservation of 25 seats in MBBS and one seat in BDS to the wards of ex-servicemen killed in action, disabled and boarded out, died in service, where death is attributable to military service etc; (d) Reservation of seats in professional colleges by various states/Uts for wards of serving and retired Armed Forces personnel; (e) Grant of Rs 400 pm to wards of war-bereaved, housed in 35 War Memorial Hostels; and (O Financial assistance from RM's discretionary funds to old and infirm ex-servicemen and their widows in indigent circumstances. In addition, the ex-servicemen have also been extended the following facilities: (i) Ministry of Railways has issued instructions to the GMs of all Indian Railways for allowing the benefit of two complimentary passes in 2nd AC /Ist Class to the Service Personnel/ex-Servicemen who have won gallantry awards like Param Vir Chakra, Maha Vir Chakra and Vir Chakra; (ii) Ex-servicemen are entitled for free medical treatment from the Military Hospitals. If not treated from the Military hospitals they are granted financial assistance equal to 60 per cent of total expenditure for treatment of serious diseases. Funds have also been provided for procurement of the Intraocular lenses for ex-Servicemen; (iii) The ex-servicemen and their families are entitled to the CSD (I) canteen facilities available in Units/Establishments; (iv) Sainik Bhawans/Rest-Houses have been provided in selected centres for the stay of the ex-servicemen who visit these places in connection with settlement of their problems; and (v) The Indira Awaas Yojana has been extended to the families of servicemen and para-military forces killed in action irrespective of the income criteria subject to the condition that: (a) they reside in rural areas, (b) they have not been covered under any other shelter rehabilitation scheme; and (c) they are house less or in need of shelter or Shelter upgradation. Other ex-servicemen are also given priority provided they fulfill the normal eligibility conditions of the Indira Awaas Yojana and have not been covered under any other shelter rehabilitation scheme.

6

CONSTITUTIONAL SYSTEM

The Polity

India, a Union of States, is a Sovereign Socialist Secular Democratic Republic with a parliamentary system of government. The Republic is governed in terms of the Constitution, which was adopted by Constituent Assembly- on 26 November 1949 and came into force on 26 January, 1950.

The Constitution which envisages parliamentary form of government is federal in structure with unitary features. President of India is constitutional head of executive of the Union. Article 74(1) of the Constitution provides that there shall be a Council of Ministers with the Prime Minister as head to aid and advise president who shall in exercise of his functions, act in accordance with such advice. Real executive power thus vests in Council of Ministers with Prime Minister as head. Council of Ministers is collectively responsible to the House of the People (Lok Sabha). Similarly, in states, Governor is head of executive, but it is the Council of Ministers with Chief Minister as head in whom real executive power vests. Council of Ministers of a state is collectively responsible to Legislative Assembly.

The Constitution distributes legislative power between Parliament and state legislatures and provides for vesting of residual powers in Parliament. Power to amend the Constitution also vests in Parliament. The Constitution has provision for independence of judiciary, Comptroller and Auditor-General, Public Service Commissions and Chief Election Commissioner

The Union and Its Territory

India comprises 25 states and seven union territories. States are: Andhra Pradesh, Assam, Arunachal Pradesh, Bihar, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh and West Bengal. Union territories are: Andaman and Nicobar Islands, Chandigarh, Dadra and Nagar Haveli, Daman and Diu, Delhi, Lakshadweep and Pondicherry.

Citizenship

The Constitution of India provides for a single and uniform citizenship for whole of India. Every person who was at the commencement of the Constitution (26 January, 1950) domiciled in the territory of India and: (a) who was born in the territory of India or (b) either of whose parents was born in the territory of India or (c) who has been ordinarily resident in the territory of India for not less than five years immediately preceding such commencement, shall be a citizen of India. The Citizenship Act, 1955 provides for acquisition and termination of citizenship after the commencement of the Constitution.

Fundamental Rights

The Constitution offers all citizens, individually and collectively, some basic freedoms. These are guaranteed in the Constitution in the form of six broad categories of Fundamental Rights which are justiceable. Article 12 to 35 contained in Part III of the Constitution deal with Fundamental Rights. These are: (i) right to equality including equality before law, prohibition of discrimination on grounds of religion, race, caste, sex or place of birth and equality of opportunity in matters of employment, (ii) right to freedom of speech and expression, assembly, association or union, movement, residence, and right to practice any profession or occupation (some of these rights are subject to security of the State, friendly relations with foreign countries, public order, decency or morality), (iii) right against exploitation, prohibiting all forms of forced labour, child labour and traffic in human beings, (iv) right to freedom of conscience and free profession, practice and propagation of religion, (v) right of any section of citizens to conserve their culture, language or script and right of minorities to establish and administer educational institutions of their choice, and (vi) right to constitutional remedies for enforcement of Fundamental Rights.

Fundamental Duties

By the 42nd Amendment of the Constitution, adopted in 1976, Fundamental Duties of the citizens have also been enumerated. Article 51 'A' contained in Part IV A of the Constitution deals with Fundamental Duties. These enjoin upon a citizen among other things, to abide by the Constitution, to cherish and follow noble ideals which inspired our national struggle for freedom, to defend the country and render national service when called upon to do so and to promote harmony and spirit of common brotherhood amongst all people of India transcending religious, linguistic and regional or sectional diversities.

Directive Principles of State Policy

The Constitution lays down certain Directive Principles of State Policy which though not justiceable, are 'fundamental in governance of the country' and it is the duty of the State to apply these principles in making laws. These lay down that the State shall strive to promote welfare of people by securing and protecting as effectively as it may a social order in which justice – social, economic and political, shall inform all institutions of national life. The State shall direct its policy in such a manner as to secure the right of all men and women to an adequate means of livelihood, equal pay for equal work and within limits of its economic capacity and development, to make effective provision for securing the right to work, education and to public assistance in the event of unemployment, old age, sickness and disablement or other cases of undeserved want. The State shall also endeavour to secure to workers a living wage, humane conditions of work, a decent standard of life and full involvement of workers in management of industries.

In the economic sphere, the State is to direct its policy in such a manner as to secure distribution of ownership and control of material resources of community to subserve the common good and to ensure that operation of economic system does not result in concentration of wealth and means of production of common detriment.

Some of the other important directives relate to provision of opportunities and facilities for children to develop in a healthy manner, free and compulsory education for all children up to the age of 14; promotion of education and economic interests of scheduled castes, scheduled tribes and other weaker sections; organisation of village panchayats; separation of judiciary from executive, promulgation of a uniform civil code for whole country; protection of national monuments; promotion of justice on a basis of equal opportunity; provision of free legal aid; protection and improvement of environment and safeguarding of forests and wildlife of the country and promotion of international peace and security, just and honourable relations between nations, respect for international law, treaty obligations and settlement of international disputes by arbitration.

The Union Executive

The Union executive consists of the President, the Vice-President and the Council of Ministers with the Prime Minister at the head to aid and advise the President.

President

The President is elected by members of an electoral college consisting of elected members of both Houses of Parliament and Legislative Assemblies of the states in accordance with the system of proportional representation by means of single transferable vote. To secure uniformity among state inter se as well as parity between the states, as a whole, and the Union, suitable weightage is given to each vote. President must be a citizen of India, not less than 35 years of age and qualified for election as member of the Lok Sabha. His term of office is five years and he is eligible for re-election. His removal from office is to be in accordance with procedure prescribed in Article 61 of the Constitution. He may, by writing under his hand addressed to the Vice-President, resign his office.

Executive power of the Union is vested in the President and is exercised by him either directly or through officers subordinate to him in accordance with the Constitution. Supreme command of defence forces of the Union also vests in him. The President summons, prorogues, addresses, sends messages to Parliament and dissolves the Lok Sabha; promulgates Ordinances at any time, except when both Houses of Parliament are in session; makes recommendations for introducing financial and money bills and gives assent to bills; grants pardons, reprieves, respites or remission of punishment or suspends, remits or commutes sentences in certain cases. When there is a failure of the constitutional machinery in a state, he can assume to himself all or any of the functions of the government of that state. The President can proclaim emergency in the country if he is satisfied that a grave emergency exists whereby security of India or any part of its territory is threatened whether by war or external aggression or armed rebellion.

Vice-President

The Vice-President is elected by members of an electoral college consisting of members of both Houses of Parliament in accordance with the system of proportional representation by means of single transferable vote. He must be a citizen. of India, not less than 35 years of age and eligible for election as a member of the Rajya Sabha. His term of office is five years and he is eligible for re-election. His removal from office is to be in accordance with procedure prescribed in Article 67 b.

The Vice-President is ex-officio Chairman of the Rajya Sabha and acts as President when the latter is unable to discharge his functions due to absence, illness or any other cause or till the election of a new President (to be held within six months) when a vacancy is caused by death, resignation or removal or otherwise of President. While so acting, he ceases to perform the function of the Chairman of the Rajya Sabha.

Council of Ministers

There is a Council of Ministers headed by the Prime Minister to aid and advice the President in exercise of his functions. The Prime Minister is appointed by the President who also appoints other ministers on the advice of Prime Minister. The Council is collectively responsible to the Lok Sabha. It is the duty of the Prime Minister to communicate to the President all decisions of Council of Ministers relating to administration of affairs of the Union and proposals for legislation and information relating to them. The Council of Ministers comprises Ministers who are members of Cabinet, Ministers of State (independent charge), Ministers of State and Deputy Ministers.

Legislature

Legislature of the Union which is called Parliament , consists of President and two Houses, known as Council of States (Rajya Sabha) and House of the People (Lok Sabha). Each House of Parliament has to meet within six months of its previous sitting. A joint sitting of two Houses can be held in certain cases.

Rajya Sabha

The Constitution provides that the Rajya Sabha shall consist of 250 members, of which 12 members shall be nominated by the President from amongst persons having special knowledge or practical experience in respect of such matters as literature, science, art and social service; and not more than 238 representatives of the states and of the union territories.

Elections to the Rajya Sabha are indirect; members representing states are elected by elected members of legislative assemblies of the states in accordance with the system of proportional representation by means of the single transferable vote, and those representing union territories are chosen in such manner as Parliament may by law prescribe. The Rajya Sabha is not subject to dissolution; one-third of its members retire on expiry of every second year.

The Rajya Sabha, at present, has 245 seats. Of these, 233 members represent the states and the union territories and 12 members are nominated by the President. The names of members of Rajya Sabha and party affiliation are given in Appendices.

Lok Sabha

The Lok Sabha is composed of representatives of people chosen by direct election on the basis of adult suffrage. The maximum strength of the House envisaged by the Constitution is now 552 (530 members to represent States, 20 to represent Union territories and not more than two members of Anglo-Indian community to be nominated by the President, if, in his opinion, that community is not adequately represented in the House). The total elective membership of the Lok Sabha is distributed among States in such a way that the ratio between the number of seats allotted to each State and population of the State is, as far as practicable, the same for all States. The Lok Sabha at present consists of 545 members; Of these, 530 members are directly elected from 25 States and 13 from seven Union territories while two are nominated by the President to represent the Anglo-Indian community. The allocation of seats in the present Lok Sabha is based on the 1971 census and under the 42nd Amendment of the Constitution (1976) will continue to be so based until figures of the first census taken after 2000 AD become available.

The term of the Lok Sabha, unless dissolved, is five years from the date appointed for its first meeting. However, while a proclamation of emergency is in operation, this period may be extended by Parliament by law for a period not exceeding one year at a time and not extending in any case, beyond a period of six months after the proclamation has ceased to operate. Twelve Lok Sabhas have been constituted so far.

Qualification for Membership of Parliament

In order to be chosen a member of Parliament, a person must be a citizen of India and not less than 30 years of age in the case of the Rajya Sabha and not less than 25 years of age in the case of the Lok Sabha. Additional qualifications may be prescribed by Parliament by law.

Functions and Powers of Parliament

As in other parliamentary democracies, Parliament of India has the cardinal functions of legislation, overseeing of adminstration, passing of budget, ventilation of public grievances and discussing various subjects like development plans, international relations and national policies. The distribution of powers between the Union and the States, followed in the Constitution, emphasises in many ways the general predominance of Parliament in the legislative field. Apart from a wide range of subjects, even in normal times Parliament can, under certain circumstances, assume legislative power with respect to a subject falling within the sphere exclusively reserved for the States.

All legislation requires consent of both the Houses of Parliament. In the case of money bills, however, the will of the Lok Sabha prevails. Delegated legislation is also subject to review and control by Parliament. Besides the power to legislate, the Constitution vests in Parliament the power to initiate amendment of the Constitution. A list of laws made by Parliament during 1997 is given in Appendices.

Parliamentary Committees

The functions of Parliament are not only varied in nature, but considerable in volume. The time at its disposal is limited. It cannot make very detailed scrutiny of all legislative and other matters that come up before it. A good deal of its business is, therefore, transacted in committees.

Both Houses of Parliament have a similar committee structure, with a few exceptions. Their appointment, terms of office, functions and procedure of conducting business, are also more or less, similar and are regulated under rules made by the two House under article 118(1) of the Constitution.

Broadly, parliamentary committees are of two kinds – standing committees and ad hoc committees. The former are elected or appointed every year or periodically and their work goes on, more or less, on a continuous basis. The latter are appointed on an ad hoc basis as need arises and they cease to exist as soon as they complete the task assigned to them.

Standing Committee: Among standing committees the three financial committees – Committee on Estimates, Public Accounts and Public Undertakings – constitute a distinct group and they keep an unremitting vigil over Government expenditure and performance. While members of the Rajya Sabha are associated with Committees on Public Accounts and Public Undertakings, members of the Committee on Estimates are drawn entirely from the Lok Sabha.

The Estimates Committee reports on 'what economies, improvements in organisation, efficiency or administrative reform consistent with policy underlying the estimates' may be effected. It also examines whether the money is well laid out within limits of the policy implied in the estimates and suggests the form in which estimates shall be presented to Parliament. The Public Accounts Committee scrutinises appropriation and finance accounts of Government and reports of the Comptroller and Auditor-General. It ensures that public money is spent in accordance with Parliament's decision and calls attention to cases of waste, extravagance, loss or negatory expenditure.

The Committee on Public Undertakings examines reports of the Comptroller and Auditor-General, if any. It also examines whether public undertakings are being run efficiently and managed in accordance with sound business principles and prudent commercial practices. The control exercised by these committees is of a continuous nature. They gather information through questionnaires, memoranda from representative non-official organisations and knowledgeable individuals, on-the-spot studies of organisations and oral examination of non-official and official witnesses. Between them, the financial committees examine and report on a fairly large area of multifarious Government activities at the Centre.

These committees have adequate procedures to ensure that their recommendations are given due consideration by Government. The progress in implementation of recommendations as well as any unresolved differences between the committees and Government are set out in 'Action Taken Reports' which are presented to the House from time to time.

Besides these three financial committees, the Rules Committee of the Lok Sabha recommended setting up of 17 Department Related Standing Committees. Accordingly, 17 Department Related Standing Committees were set up on 8 April, 1993. The functions of these committees shall be: (a) to consider the Demands for Grants of various ministries/departments of Government of India and make a report to the Houses; (b) to examine such Bills as are referred to the Committee by the Chairman, Rajya Sabha or the Speaker, Lok Sabha, as the case may be, and make report thereon; (c) to consider Annual Reports of ministries/departments and make reports thereon; and (d) to consider policy documents presented to the Houses, if referred to the Committee by the Chairman, Rajya Sabha or the Speaker, Lok Sabha, as the case may be, and make reports thereon.

Other standing committees in each House, divided in terms of their functions, are: (i) Committees to Inquire: (a) Committee on Petitions examines petitions on bills and on matters of general public interest and also entertains; representations on matters concerning Central subjects; and (b) Committee of Privileges examines any question of privilege referred to it by the House or Speaker/Chairman; (ii) Committees to Scrutinise: (a) Committee on Government Assurances keeps track of all assurances, promises, undertakings, etc., given by ministers in the House and pursues them till they are implemented; (b) Committee on Subordinate Legislation scrutinises and reports to the House whether tile power to make regulations, rules, sub-rules, bye-laws, etc., conferred by the Constitution or Statutes is being properly exercised by authorities so authorised; and (c) Committee on Papers Laid on the Table examines all papers laid on the table of the House by ministers, other than statutory notifications and orders which come within the purview of the Committee on Subordinate Legislation, to see whether there has been compliance with provisions of the Constitution, Act, rule or regulation under which the paper has been laid; (iii) Committees relating to the day-to-day business of the House: (a) Business Advisory Committee recommends allocation of time for items of Government and other business to be brought before the House; (b) Committee on Private Members' Bills and Resolutions of the Lok Sabha classifies and allocates time to Bills introduced by private members, recommends allocation of time for discussion on private members' resolutions and examines Constitution amendment bills before their introduction by private members in the Lok Sabha. The Rajya Sabha does not have such a committee. It is the Business Advisory Committee of that House which recommends allocation of time for discussion on stage or stages of private members' bills and resolutions; (c) Rules Committee considers matters of procedure and conduct of business in the House and recommends amendments or additions to the Rules; and (d) Committee on Absence of Members from the Sitting of the House of the Lok Sabha considers all applications from members for leave of absence from sitting of the House. There is no such committee in the Rajya Sabha. Applications from members for leave of absence are considered by the House itself; (iv) Committee on the Welfare of Scheduled Castes and Scheduled tribes, on which members from both Houses serve, considers all matters relating to welfare of scheduled castes and scheduled tribes which come within the purview of the Union Government and keeps a watch whether constitutional safeguards in respect of these classes are properly implemented; (v) Committees concerned with provisions of facilities to members: (a) General Purposes Committee considers and advises Speaker/Chairman on matters concerning affairs of the House, which do not appropriately fall within the purview of any other parliamentary committee; and (b) House Committee deals with residential accommodation and other amenities for members; (vi) Joint Committee on Salaries and Allowances of Members of Parliament, constituted under the Salary, Allowances and Pension of Members of Parliament Act, 1954, apart from framing rules for regulating payment of salary, allowances and pension to Members of Parliament, also frames rules in respect of amenities like medical, housing, telephone, postal, constituency and secretariat facility; (vii) Joint Committee on Offices of Profit examines the composition and character of committees and other bodies appointed by Central and State Governments and Union territory administrations and recommends what offices ought to or ought not to disqualify a person for being chosen as a member of either House of Parliament; (viii) Library Committee consisting of members from both Houses, considers matters concerning Library of Parliament; (ix) on 29 April 1997 a Committee on Empowerment of Women with members from both the Houses was constituted with a view to securing, among other things, status, dignity and equality for women in all fields. On 4 March, 1997, Ethics Committee of the Rajya Sabha was constituted.

Ad hoc Committees: Such committees may be broadly classified under two heads (a) committees which are constituted from time to time, either by two Houses on a motion adopted in that behalf or by Speaker/Chairman to inquire into and report on specific subjects. (e.g., Committees on the Conduct of certain Members during President's Address, Committees on Draft Five-Year Plans, Railway Convention Committee, Joint Committee on Bofors Contracts, Joint

Committee on Fertilizer Pricing and Joint Committee to enquire into irregularities in securities and banking transactions, etc.) and (b) Select or Joint Committees on Bills which are appointed to consider and report on a particular bill. These committees are distinguishable from other ad hoc committees inasmuch as they are concerned with bills and the procedure to be followed by them is laid down in the Rules of Procedure and Directions by Speaker/Chairman.

Leaders of Opposition in Parliament

In keeping with their important role, the Leaders of Opposition in the Rajya Sabha and the Lok Sabha are accorded statutory recognition. Salary and other suitable facilities are extended to them through a separate legislation brought into force on 1 November, 1977.

Government Business in Parliament

The Minister of Parliamentary Affairs has been entrusted with the responsibility of coordinating, planning and arranging Government Business in both Houses of Parliament. In the discharge of this function, he is assisted by his Ministers of State. The Ministry works under the overall direction of Cabinet Committee on Parliamentary Affairs. The Minister of Parliamentary Affairs also keeps close and constant contact with the presiding officers, the leaders as well as chief whips and whips of various parties and groups.

Consultative Committees

The Ministry of Parliamentary Affairs constitutes Consultative Committees of Members of Parliament attached to various Ministries and arranges meetings thereof. The Minister/Minister of State. In-charge of the Ministry concerned acts as the Chairman of the Consultative Committee of that Ministry. The Committees are meant for informal discussions between the Government and Members of Parliament on policies and programmes of the Government, and the manner of implementation thereof. Meetings of these Committees are held both during Parliament Session periods and the inter-session periods. The Minister of Parliamentary Affairs nominates

Members of Parliament on Committees, Councils, Boards and Commissions, etc., set up by the Government.

Exchange of Delegation of MPs

In view of the fast changing global scenario and in order to project and propagate India's national policies, programmes and problems among other countries in proper prospective and to secure their confidence in favour of India, this Ministry has revived its activity of exchanging delegations of Members of Parliament with other countries. This Ministry received delegations of the Russian Duma and Hungarian Members of Parliament in India and sent one Delegation of MPs each to Mauritius and China and Hong Kong during the financial year 1996-97. Beside these delegations, three Members of Parliament were sponsored by this Ministry for participation in XIV World Festival of Youth and Students held in Havana during 1997-98.

Youth Parliament Competition

In order to develop democratic ethos in the younger generation the Ministry conducts Youth Parliament Competitions in various categories of schools and universities/colleges. The Youth Parliament Scheme was first introduced in the schools in Delhi in 1966-67. Kendriya Vidyalayas located in and around Delhi were incorporated into the ongoing Scheme for Delhi schools in 1978. Subsequently, a separate scheme of Youth Parliament for Kendriya Vidyalayas at the National Level was launched in 1988. During 1997 the 32nd Youth Parliament Competition for schools in Delhi was completed in which 53 schools participated. The tenth National Youth Parliament Competition for Kendriya Vidyalayas was also held during 1997 with 172 Kendriya Vidyalayas participating in it. Orientation Courses for this purpose were held at Delhi, Guwahati, Lucknow, Udaipur and Bhubaneswar for the teachers of the participating schools/vidyalayas. The Youth Parliament Competitions were also organised by 22 states/UTs. Two new National Youth Parliament Schemes one for Navodaya Vidyalayas and the other for universities/colleges located in various parts of the country were launched during the Golden Jubilee Year of Independence. The First National Youth Parliament Competitions of both the Navodaya Vidyalayas and universities were successfully completed during 1997-98.

Parliament Privileges

The Ministry of Parliamentary Affairs, Government of India, has been organising All India Whips' Conferences from time to time, with the purpose of establishing suitable links amongst the whips of various political parties at the Centre and in the states who are concerned with the practical working of the legislatures to discuss matters of common interest and to evolve high standards to strengthen the institutions of parliamentary democracy. The Twelfth All India Whips' Conference was held in Srinagar Jammu and Kashmir) on the 21 and 22 August 1997. 110 delegates consisting of Ministers of Parliamentary Affairs of the Centre and the State Governments and Chief Whips/Whips of political parties in Parliament as well as State Legislatures attended the Conference. The Ministry of Parliamentary Affairs takes follow up action on matters raised under Rule 377 of the Rules of Procedure and Conduct of Business in Lok Sabha and by way of Special Mentions in Rajya Sabha.

After 'Question Hour' in the two Houses of Parliament, Members raise matters of urgent public importance. Though it is not mandatory, yet Ministers sometimes do react to such matters. Whenever Ministers of Parliamentary Affairs assure the House/ Members to convey the sentiments of the House on such issues to the Ministers concerned, Ministry of Parliamentary Affairs forwards relevant extracts from the proceedings of the respective Houses to the Minister concerned for such action as may be deemed necessary. Extracts of proceedings of the Houses relating to references made to the Prime Minister are also forwarded by the Ministry to Prime Minister's Office for information.

Implementation of Assurances

The Ministry culls out assurances, promises, undertakings, etc., given by Ministers in both Houses of Parliament, from the daily proceedings and forwards them to concerned Ministries and Departments for implementation. Statements showing action taken by the Government in implementation of assurances, after due scrutiny of the implementation reports received from the various

Ministries/Departments concerned, are laid periodically on the table of the Houses by Minister/Minister of State for Parliamentary Affairs. During the period from 1 April, 1997 to 31 March, 1998 a total of 2,524 new assurances were marked and 3,280 assurances (including those culled out in previous years) were implemented/disposed of in respect of both the Houses of Parliament.

Administrative Set-Up

The Government of India (Allocation of Business) Rules, 1961 is made by the President of India under the Article 77 of the Constitution for the allocation of business of the Government of India. The ministries/departments of the Government of India are created by the President on the advice of the Prime Minister under these Rules. The business of the Government of India are transacted in the ministries/departments, secretariats and offices (referred to as "Department") as per the distribution of subjects specified in these Rules. Each of the Ministry (ies) will be assigned to a Minister by the President on the advice of the Prime Minister. Each department will be generally under the charge of a Secretary to assist the Minister on policy matters and general administration.

The Cabinet Secretariat is responsible for secretarial assistance to the Cabinet, its committees and ad hoc Groups of Ministers, and for maintenance of record of their decisions and proceedings. The Secretariat monitors implementation of the decisions/ directions of the Cabinet/Cabinet committees/groups of ministers. The Secretariat is also responsible for the administration of the Government of India (Transaction of Business) Rules, 1961 and facilitates smooth transaction of business in ministries/ departments of the Government by ensuring adherence to these Rules. The Secretariat assists in decision-making in Government by ensuring inter-ministerial co-ordination ironing out differences amongst ministries/departments and evolving consensus through the instrumentality of the standing/ad hoc committees of secretaries. Through this mechanism new policy initiatives are promoted. The Cabinet Secretariat ensures that the President, the Vice-President and ministers are kept informed of the major activities of all ministries/departments by means of monthly summary of their activities. Management of major crisis situations in the country and coordinating activities of various ministries in such a situation is also one of the functions of this Secretariat.

Ministries/Departments of the Government

The Government consists of a number of ministries/departments, number and character varying from time to time on factors such as volume of work, importance attached to certain items, changes of orientation, political expendiency, etc. On 15 August 1947, the number of ministries at the Centre was 18. As on 5 June 1998 the Government consists of the following ministries/departments under the Government of India (Allocation of Business) Rules, 1961:

1. Ministry of Agriculture
   - (i) Department of Agriculture and Cooperation,
   - (ii) Department of Agricultural Research and Education,
   - (iii) Department of Animal Husbandry and Dairying.
2. Ministry of Chemicals and Fertilizers
   - (i) Department of Chemicals and Petro-Chemicals,
   - (ii) Department of Fertilizers.
3. Ministry of Civil Aviation
4. Ministry of Coal
5. Ministry of Commerce
   - (i) Department of Commerce,
   - (ii) Department of Supply.
6. Ministry of Communications
   - (i) Department of Posts,
   - (ii) Department of Telecommunications.
7. Ministry of Defence
   - (i) Department of Defence,
   - (ii) Department of Defence Production and Supplies,
   - (iii) Department of Defence Research and Development.
8. Ministry of Environrment and Forests
9. Ministry of External Affairs

10. **Ministry of Finance**
    (i) Department of Economic Affairs,
    (ii) Department of Expenditure,
    (iii) Department of Revenue.

11. **Ministry of Food and Consumer Affairs**
    (i) Department of Food and Civil Supplies,
    (ii) Department of Consumer Affairs,
    (iii) Department of Sugar and Edible Oils.

12. **Ministry of Food Processing Industries**

13. **Ministry of Health and Family Welfare**
    (i) Department of Health,
    (ii) Department of Family Welfare,
    (iii) Department of Indian Systems of Medicine and Homeopathy.

14. **Ministry of Home Affairs**
    (i) Department of Internal Security,
    (ii) Department of States,
    (iii) Department of Official Language,
    (iv) Department of Home,
    (v) Department of Jammu and Kashmir Affairs.

15. **Ministry of Human Resource Development**
    (i) Department of Education,
    (ii) Department of Youth Affairs and Sports,
    (iii) Department of Culture,
    (iv) Department of Women and Child Development.

16. **Ministry of Industry**
    (i) Department of Industrial Development,
    (ii) Department of Public Enterprises,
    (iii) Department of Heavy Industry,
    (iv) Department of Small Scale Industries and Agro and Rural Industries,
    (v) Department of Industrial Policy and Promotion.

17. **Ministry of Information and Broadcasting**
18. **Ministry of Labour**
19. **Ministry of Law, Justice and Company Affairs**
    - (i) Department of Legal Affairs,
    - (ii) Legislative Department,
    - (iii) Department of Justice,
    - (iv) Department of Company Affairs.
20. **Ministry of Non-Conventional Energy Sources**
21. **Ministry of Parliamentary Affairs**
22. **Ministry of Personnel, Public Grievances and Pensions**
    - (i) Department of Personnel and Training,
    - (ii) Department of Administrative Reforms and Public Grievances,
    - (iii) Department of Pensions and Pensioners' Welfare.
23. **Ministry of Petroleum and Natural Gas**
24. **Ministry of Planning and Programme Implementation**
    - (i) Department of Planning,
    - (ii) Department of Statistics,
    - (iii) Department of Programme Implementation.
25. **Ministry of Power**
26. **Ministry of Railways**
27. **Ministry of Rural Areas and Employment**
    - (i) Department of Rural Development,
    - (ii) Department of Wastelands Development,
    - (iii) Department of Rural Employment and Poverty Alleviation.
28. **Ministry of Science and Technology**
    - (i) Department of Science and Technology,
    - (ii) Department of Scientific and Industrial Research,
    - (iii) Department of Bio-Technology.

29. **Ministry of Steel and Mines**
    (i) Department of Steel,
    (ii) Department of Mines.
30. **Ministry of Surface Transport**
31. **Ministry of Textiles**
32. **Ministry of Tourism**
33. **Ministry of Urban Affairs and Employment**
    (i) Department of Urban Development,
    (ii) Department of Urban Employment and Poverty Alleviation.
34. **Ministry of Water Resources**
35. **Ministry of Social Justice and Empowerment**
36. **Department of Atomic Energy**
37. **Department of Electronics**
38. **Department of Ocean Development**
39. **Department of Space**
40. **Cabinet Secretariat**
41. **President's Secretariat**
42. **Prime Minister's Office**
43. **Planning Commission**

PUBLIC SERVICES

All India Services

Prior to Independence, the Indian Civil Service (ICS) was the seniormost amongst the Services of the Crown in India. Besides the ICS, there was also the Indian Police Service. After Independence, it was felt that though the ICS was a legacy of the imperial period there was need for the All India Service for maintaining the unity, integrity and stability of the nation. Accordingly, a provision was made in Article 312 of the Constitution for creation of one or more All India Services common to the Union and State. Indian Administrative

Service and Indian Police Service are deemed to be constituted by the Parliament in terms of Article 312 of the Constitution. After the promulgation of the Constitution, a new All India Service, namely, Indian Forest Service, was created in 1966. A common unique feature of the All India Services is that the members of these services are 1 recruited by the Centre but their services are placed under various State cadres and they have the liability to serve both under the State and under the Centre. This aspect of the All India Services strengthens the unitary character of the Indian federation.

Of the three All India Services, namely, the Indian Administrative Service (IAS), the Indian Police Service (IPS) and the Indian Forest Service (IFS), the Ministry of Personnel, Public Grievances and Pensions is the cadre controlling authority for the IAS. The recruitment to all the three services is made by the UPSC through the Civil Services Examination conducted every year. These officers are recruited and trained by the Central Government and then allotted to different State cadres. There are now 21 State cadres including three Joint cadres, namely, (i) Assam and Meghalaya, (ii) Manipur and Tripura and (iii) Arunachal Pradesh, Goa, Mizoram and the Union Territories (AGMU). The authorised cadre strength of Indian Administrative Service as on 1 January, 1998 was 5,094 and the actual number of IAS Officers in position was 4,942.

Central Secretariat Services

The Central Secretariat has three services, namely, (i) Central Secretariat Service (CSS), (ii) Central Secretariat Stenographers' Services (CSSS) and (iiij The Central Secretariat Clerical Service (CSCS). The Section Officers' Grade and Assistants' Grade of CSS, Grade 'D' 'C' and 'A' and 'B' (merged) of CSSS and Grade I and II of CSCS are decentralised. The grade of Principal Private Secretary of CSSS and selection grade, and Grade I of CSS are centralised. Appointments and promotions in the Centralised grade are made on all secretariat basis. In respect of the decentralised grades, Department of Personnel and Training monitors and assesses the overall requirements of different cadres for fixing zones of promotion against the vacancies in seniority quota and arranges centralised recruitment against direct recruitment and departmental examination quota vacancies through open competitive and departmental examination.

Unioin Public Service Commission

The Constitution provides for an independent body known as Union Public Service Commission (UPSC) for recruitment to Group 'A' and 'B' civil posts under Central Government and for advice in various service matters. The Chairman and members of the Commission are appointed by the President for tenure of six years or till they attain the age of 65 years, whichever is earlier. To ensure independence, members who were at the service of Government at the time of appointment are deemed to have retired from Government services on their appointment in the Commission. The Chairman and members are also not eligible for further employment under the Government. They cannot be removed except for 'he reasons and in the manner provided for in the Constitution. The Annual Report of UPSC is laid in both the Houses of Parliament.

Staff Selection Commission (SSC)

Staff Selection Commission initially known as Subordinate Services Commission was set up on 1 July 1976 primarily to make recruitment on zonal basis for non-technical Group 'C' posts under the Central Government except the posts for which recruitment is made by Railway Service Commission and the industrial establishment. The Commission has also been entrusted with responsibilities of making recruitment to two Group 'B' services-Assistants' Grade and Stenographers' Grade 'C'. The Commission has a Chairman and two members. The tenure of Chairman/members is for five years or till they attain the age of 62 years, whichever is earlier. The Commission's headquarters and the office of its Northern Region are in New Delhi . The offices of Central, Western, North-Western, Eastern, North-Eastern and Southern Region are at Allahabad, Mumbai, Chandigarh, Calcutta, Guwahati and Chennai respectively. Its sub-regional offices are at Raipur and Bangalore.

Official Language

Hindi, according to Article 343(1) of the Constitution, is the Official Language of the Union. But provision was also made in Article 343(2) for continuing the use of English in official work for a period of 15 years (i.e. upto 25 January, 1965) from the date of commencement of the Constitution. Article 343(3) empowered Parliament to provide by law for continued use of English for official purposes even after 25 January 1965. Accordingly, the Official Languages Act, 1963 (amended in 1967) was passed for continuing the use of English in official work even after 25 January 1965. The Act also lays down that both Hindi and English shall compulsorily be used for certain specified purposes, such as resolutions, general orders, rules, notifications, press communiques, administrative and other reports, licences, permits, contracts, agreements, etc.

Under provisions of Section 8 of the Act, Government has framed the Official Languages (use for official purposes of the Union) Rules, 1976. Its salient features are: (i) they apply to all the Central Government offices including any office of a commission, committee or tribunal appointed by the Centre and corporation or company owned or controlled by it; (ii) communications from a Central Government office to states/union territories in Region 'A' (Uttar Pradesh, Himachal Pradesh, Madhya Pradesh, Bihar, Rajasthan, Haryana, Andaman and Nicobar Islands and Delhi) shall be in Hindi; (iii) communications from a Central Government office to states/union territories in Region 'B' (Punjab, Gujarat, Maharashtra and Chandigarh) shall ordinarily be in Hindi. However, communications to any person in Region 'B' may be either in English or Hindi; (iv) communications between Central Government offices and from Central offices to the offices of the state governments/ union territories and individuals etc., will be in Hindi in such proportions as determined from time to time; (v) all manuals, codes, and other procedural literature relating to Central Government offices is required to be prepared both in Hindi and English. All forms, headings of registers, name plates, notice boards and various items of stationery etc., is also required to be in Hindi and English; (vi) it shall be the responsibility of the officer signing documents specified in Section 3 (3) of the Act to ensure that these are issued both in Hindi and English; (vii) it is necessary that all electronic equipment to be purchased in Central ministries/departments and their attached and subordinate offices, public undertakings and nationalised banks, etc., should have facility in both Devanagari as well as Roman script; (viii) all those employees should be imparted training in Hindi workshops who have attained working knowledge or proficiency in Hindi and who earlier have not been imparted training in such workshops; (ix) optional use of Hindi as alternative medium should be allowed and question papers be prepared in both languages (Hindi and English) in all in-service departmental and promotional examinations (including all-India basis) of all ministries/departments and their attached and subordinate offices and corporations/undertakings/banks etc., owned or controlled by the Centre. Where an interview is to be held, candidates are to be allowed the option to answer in Hindi; (x) optional use of Hindi as alternative medium in examinations conducted on regional or local basis for direct recruitment to services and posts in subordinate offices of Central Government should be allowed in the manner specified; (xi) arrangements for teaching in training institutes of the Centre should be made in Hindi according to procedure laid down; (xii) proportion of typists in Central Government offices trained through Hindi medium has been fixed and should be followed accordingly; (xiii) proportion of stenographers/typists as well as Devanagari typewriters in Central Government offices should be (a) 90 per cent in the headquarters of ministries and departments located in region 'A' ; (b) 90 per cent in rest of the offices located in region 'A'; (c) 66-2/3 per cent in all the offices located in region 'B' and; (d) 30 per cent in all the offices located in region 'C'; (xiv) employees who possess proficiency in Hindi in Regions 'A' and 'B' are to submit drafts of following communications in Hindi only: (a) communications to states/union territories in Regions 'A' and 'B' and to all offices/undertakings etc., of Central Government or any person in those regions; (b) replies to all communications received in Hindi; (c) reply to any application, appeal or representation from any employee written or signed in Hindi and; (d) they are also to do noting in Hindi on files for which orders have been given to put up draft of communication in Hindi only; (xv) there should be an option to present research papers, etc., in Hindi, in seminars, discussions, conferences, etc., organised by the Central Government; (xvi) 50 per cent of the total grant, earmarked for the purchase of books, should be utilised for the purchase of books published in Hindi; (xvii) it shall be the responsibility of the administrative head of each Central Government office to ensure that provisions of the Act, rules and directions issued thereunder are properly complied and devise suitable and effective check points for this purpose.

In compliance with the Official Language Resolution, 1968, an Annual Programme is prepared by the Department of Official Language each year in which targets are fixed to be achieved by the offices of the Central Government in regard to making correspondence, sending telegrams, telex etc., in Hindi. A Quarterly Progress Report is called for from the offices of the Central Government in regard to the above said targets. An Annual Assessment Report is prepared on the basis of the Quarterly Progress Report. It is laid in both Houses of the Parliament and its copies endorsed to state governments and the ministries/departments of the Central Government. The deficiencies observed in it are brought to the notice of concerned administrative heads for taking remedial action. Eight Regional Implementation Offices have been established as subordinate offices of the Department for inspections of Central Government offices spread all over the country. These offices are located at Mumbai, Calcutta, Bangalore, Ghaziabad, Guwahati, Bhopal, Cochin and Delhi. Besides, the Department organises the regional official language conferences to discuss various aspects of the implementation of official language policy.

Training

Under the Hindi Teaching Scheme, being run by the Department of Official Language, training in Hindi language is being imparted through 74 full-time and 93 part-time centres throughout the country. Like-wise, training in Hindi stenography and Hindi typing is being provided through 17 full-time and 55 part-time centres. The work relating to this scheme is divided amongst five regions. The headquarters of these regions are located in Delhi, Jabalpur, Mumbai, Chennai and Calcutta. The Kendriya Hindi Prashikshan Sansthan was established on 31 May, 1985 as a subordinate office of the Department of Official Language with the object to provide full-time training as also training through correspondence in Hindi language, Hindi stenography and Hindi typing. Its sub-centres are opened in 1988 in Mumbai, Calcutta and Bangalore and in Chennai and Hyderabad in the year 1990. The Central Translation Bureau has been conducting three-month translation training courses for the officers/employees connected with the translation work. Earlier, this training was being imparted in Delhi alone. But, in order to meet regional requirements, translation training centres have been opened in Mumbai, Bangalore and Calcutta. In addition, the Bureau is also conducting brief translation training courses of five working days and 21 working days duration.

Publication

Rajbhasha Pushpamala and Rajbhasha Bharati are the two important magazines of the Department of Official Language. The former is a monthly while the latter is quarterly. Various compilations, charts, pamphlets and folders etc., are also being published to give information about the activities relating to Official Language. TV/Radio spots are also being produced/relayed. Feature films on various themes of Hindi have also been produced /shown. Besides, a calendar showing Rajbhasha Ke Badte Charan in various fields like postal, banking, science and technology, etc., is also being brought out.

Committees/Samiti

The Committee of Parliament on Official Language was constituted in 1976 under Section 4 of the Official Languages Act, 1963. The Committee comprises of 20 members from the Lok Sabha and 10 from Rajya Sabha. The duty of the Committee is to review the progress made in the use of Hindi for official purposes of the Union and submit a report to the President making recommendations thereon. It has so far submitted five volumes of its report to the President. These have also been laid on the table of both the Houses. The Presidential Orders have been passed on first four reports. The fifth report is in process of Presidential Order made on it.

Kendriya Hindi Samiti is constituted under the Chairmanship of the Prime Minister to coordinate the efforts being made by various ministries/departments in regard to progressive use of Hindi in official work and also for the propagation and development of Hindi. The Apex Committee meant for giving guidelines in regard to Official Language Policy includes besides Prime Minister, some Union Ministers, Chief Minister of some states, MPs and other learned persons of Hindi and other Indian languages as its members.

Hindi Sajahakar Sanaitis have been constituted in various ministries/departments under the Chairmanship of the ministers concerned. These committees review the progress made in the use of Hindi in their respective ministries/departments and their offices/ undertakings and suggest measures to promote the use of Hindi and also for implementation of the Official Language Policy.

Central Official Language Implementation Committee reviews the position about the use of Hindi for official purposes of the Central Government, the training of its employees in Hindi and the implementation of instructions issued from time to time by the Department of Official Language and suggests measures for removing the shortcomings and difficulties noticed in implementing these. Town Official Language Implementation Committees constituted in major towns having Central Government offices in sufficient number review the progress made in the use of Hindi in these offices.

Award Schemes

The scheme of Indira Gandhi Rajbhasha Shield and Indira Gandhi Rajbhasha Puraskar has been introduced by the Department of Official Language during 1986-87 to give awards to various ministries/departments, banks and financial institutions, public sector undertakings and individuals for outstanding achievements for promoting the i Official Language Policy of the Government. The Town Official Language Implementation Committees are eligible for one award each region-wise. The Town: Official Language Implementation Committees and the local offices of the region are awarded prizes for the best performance in Hindi work by the concerned regional implementation offices. Besides a number of incentive schemes are being run by the ministries/departments.

Comptroller and Auditor-General

Comptroller and Auditor-General is appointed by the President. Procedure and grounds for his removal from office are the same as for a Supreme Court Judge. He is not eligible for further office under the Union or a State Government after he ceases to hold his office. His duties, powers and conditions of service have been specified by the Comptroller and Auditor-General's (Duties, Powers and Conditions of Service) Act, 1971. The President on advice of Comptroller and Auditor-General prescribes the form in which accounts of the Union and states are to be kept. His reports on accounts of the Union and states are submitted to the President and respective governors which are placed before Parliament and state legislatures.

Adminsitrative Reforms and Public Grievances

The Department of Administrative Reforms and Public Grievances in the Ministry of Personnel, Public Grievances and Pensions is the nodal agency of the Government of India for Administrative reforms as well as redressal of public grievances relating to the states in general and Central Government agencies in particular. The Department disseminates information on important activities of the Government relating to administrative reforms and public grievance redressal through management, publications and documentation. The Department also undertakes activities in the field of International Cooperation and exchanges to promote Public Service Reforms.

The Implementation of the Action Plan and the Statement adopted at the Conference of Chief Ministers held on 24 May, 1997 was pursued with the ministries/ departments of the Central government and the state governments/UT administrations. Major accomplishments in this regard are: 43 Citizens' Charters have been finalised by various ministries/departments/agencies. The Governments of NCT of Delhi, Haryana and Tamil Nadu, have also finalised 14 Citizens Charters; a system of categorising all the public grievances and their computerised monitoring has been installed in all departments linking it to the main terminal in the Department of Administrative Reforms and Public Grievances; steps have been taken by about 40 ministries/ departments, through expert task forces or by internal exercises for a detailed review of law, regulations and procedures; Information and Facilitation Centres (IFCs) have been set up in 42 ministries/departments and in case of other eight ministries/ departments the matter is being pursued; a Bill for Freedom of Information has been drafted and a code of ethics for Government servants, as endorsed by the Conference of Chief

Ministers has been drafted for submission to Government and for subsequent notification in the form of revision to Code of Conduct Rules.

The Efficiency Unit set up as a part of the Cabinet Secretariat, but under the Ministry, has completed a study on Restructuring the Government and Workforce Size Control following the recommendations of the Fifth Central Pay Commission. The study covered the Ministries of Human Resource Development, Industry, Rural Development and Power. Two more studies covering the Ministry of Finance, Planning Commission and the Department of Programme Implementation, the Ministry of Health and Family Welfare have also been taken up.

The Department provides management consultancy services to Central Government ministries/organisations. A UNDP assisted project on capacity building for civil service, Administrative Reforms and Training in the Centre and the states is being executed jointly by the Department and the Training Division of the Ministry. Detailed studies have been undertaken in personnel, industrial development and urban development sectors through task forces set up- in the Ministry of Personnel, Public Grievances and Pensions; Industry and Urban Affairs and Employment, and three states of Assam, Haryana and Kerala. The Department brings out the following publications: (i) Civil Services News (a monthly newsletter), (ii) Management in Government (a quarterly journal), and (iii) A Bulletin of Administrative Intelligence (an in-house publication with a limited circulation to top management of Government of India). The Department is actively involved in the dissemination of good practices, documentation of field experiences, etc.

Memorandum of Understanding with China

A Memorandum of Understanding (MOU) for co-operation between India and China in the field of Civil Services, Personnel Management and Public Administration has been in operation since February 1992. The MOU envisages conduct of professional study tours as well as exchange of experts in these areas. Under the MOU, a five-member Chinese delegation led by Vice-Minister of Personnel, PRC visited India from 29 September-1997 to 1 October

1997. In October 1997, a three-member Indian delegation led by Director, LBSNAA visited China and Hong-Kong for discussion on the various aspects of Civil Services Management, reforms, training, etc.

Under a plan scheme launched in 1987-88, an amount of Rs 730 lakh was sanctioned to various ministries/departments of the Central Government up to 1997-98 for improvements in their work environment. The budget provision of Rs 160 lakh made for the year 1997-98 has been fully utilised.

The States

The system of government in states closely resembles that of the Union.

Executive Governor

State executive consists of Governor and Council of Ministers with Chief Minister as its head. Governor of a state is appointed by the President for a term of five years and holds office during his pleasure. Only Indian citizens above 35 years of age are eligible for appointment to this office. Executive power of the State is vested in Governor.

Council of Ministers with Chief Minister as head, aids and advises Governor in exercise of his functions except in so far as he is by or under the Constitution required to exercise his functions or any of them in his discretion. In respect of Nagaland, Governor has special responsibility under Article 371A of the Constitution with respect to law and order and even though it is necessary for him to consult Council of Ministers in matters relating to law and order, he can exercise his individual judgement as to the action to be taken.

Similarly, in respect of Arunachal Pradesh, Governor has special responsibility under Article 371A of the Constitution with respect to law and order and in discharge of his functions in relation thereto. Governor shall, after consulting Council of Ministers, exercise his individual judgement as to the action to be taken. These are, however, temporary provisions if President, on receipt of a report from governor or otherwise is satisfied that it is no longer necessary for Governor to have special responsibility with respect to law and order, he may so direct by an order.

Likewise, in the Sixth Schedule which applies to tribal areas of Assam, Meghalaya, Tripura and Mizoram as specified in para 20 of that Schedule, discretionary powers are given to Governor in matters relating to sharing of royalties between district council and state government. Sixth Schedule vests additional discretionary powers in Governors of Mizoram and Tripura in almost all their functions (except approving regulations for levy of taxes and money lending by non-tribals by district councils) since December 1998. In Sikkim, Governor has been given special responsibility for peace and social and economic advancement of difference sections of population.

All Governors while discharging such constitutional functions as appointment of Chief Minister of a state or sending a report to President about failure of constitutional machinery in a state or in respect of matters relating to assent to a Bill passed by legislature, exercise their own judgement.

Council of Minister

The Chief Minister is appointed by the Governor who also appoints other ministers on the advice of the Chief Minister. The Council of ministers is collectively responsible to legislative assembly of the State.

Legislature

For every state, there is a legislature which consists of Governor and one House or, two Houses as the case may be. In Bihar, Jammu and Kashmir, Karnataka, Maharashtra and Uttar Pradesh, there are two Houses known as legislative council and legislative assembly. In remaining states, there is only one House known as legislative assembly. Parliament may, by law, provide for abolition of an existing legislative council or for creation of one where it does not exist, if proposal is supported by a resolution of the legislative assembly concerned.

Legislative Council

Legislative Council (Vidhan Parishad) of a state comprises not more than one-third of total number of members in legislative assembly of the state and in no case less than 40 members (Legislative Council of Jammu and Kashmir has 36 members vide Section 50 of the Constitution of Jammu and Kashmir). About one-third of members of the council are elected by members of legislative assembly from amongst persons who are not its members, one-third by electorates consisting of members of municipalities, district boards and other local authorities in the state, one-twelfth by electorate consisting of persons who have been, for at least three years, engaged in teaching in educational institutions within the state not lower in standard than secondary school and a further one-twelfth by registered graduates of more than three years standing. Remaining members are nominated by Governor from among those who have distinguished themselves in literature, science, art, cooperative movement and social service. Legislative councils are not subject to dissolution but one-third of their members retire every second year.

Legislative Assembly

Legislative Assembly (Vidhan Sabha) of a state consists of not more than 500 and not less than 60 members (Legislative Assembly of Sikkim has 32 members vide Article 371F of the Constitution) chosen by direct election from territorial constituencies in the state. Demarcation of territorial constituencies is to be done in such a manner that the ratio between population of each constituency and number of seats allotted to it, as far as practicable, is the same throughout the state. Term of an assembly is five years unless it is dissolved earlier.

Power and Functions

State legislature has exclusive powers over subjects enumerated in List II of the Seventh Schedule of the Constitution and concurrent powers over those enumerated in List III. Financial powers of legislature include authorisation of all expenditure, taxation and borrowing by the state government. Legislative assembly alone has power to originate money bills. Legislative council can make only recommendations in respect of changes it considers necessary within a period of fourteen days of the receipt of money bills from assembly. Assembly can accept or reject these recommendations.

Reservation of Bills

The Governor of a state may reserve any Bill for the consideration of the President. Bills relating to subject like compulsory acquisition of property, measures affecting powers and position of High Courts and imposition of taxes on storage, distribution and sale of water or electricity in inter-state river or river valley development projects should necessarily be so reserved. No Bills seeking to impose restrictions on inter-state trade can be introduced in a state legislature without previous sanction of president.

Control Over Executive

State legislatures, apart from exercising usual power of financial control, use all normal parliamentary devices like questions, discussions, debates, adjournments and no-confidence motions and resolutions to keep a watch over day-to-day work of the executive. They also have their committees on estimates and public accounts to ensure that grants sanctioned by legislature are properly utilised.

Union Territories

Union territories are administrated by the President acting to such extent as he thinks fit, through an Administrator appointed by him. Administrators of Andaman and Nicobar Islands, Delhi and Pondicherry are designated as Lieutenant Governors, while Administrator of Chandigarh is designated as Chief Commissioner. However, presenUy, the Governor of Punjab is concurrently the Administrator of Chandigarh. The Administrator of Dadra and Nagar Haveli is concurrently the Administrator of Daman and Diu. Lakshadweep has a separate Administrator.

The National Capital Territory of Delhi and Union Territory of Pondicherry each has a legislative assembly and council of ministers. Legislative assembly of Union Territory of Pondicherry may make laws with respect to matters enumerated in List II or List III in the Seventh Schedule of the Constitution in so far as these matters are applicable in relation to the union territory. The legislative assembly of National Capital Territory of Delhi has also these powers with the exceptions that Entries 1, 2 and 18 of the List II are not within the legislative competence of the legislative assembly. Certain categories of Bills, however, require the prior approval of the Central Government for introduction in the legislative assembly. Some Bills, passed by the legislative assembly of the Union Territory of Pondicherry and National Capital Territory of Delhi are required to be reserved for consideration and assent of the President.

LOCAL GOVERNMENT

Municipalities

Municipal bodies have a long history in India. The first such Municipal Corporation was set up in the former Presidency Town of Madras in 1688 and was followed by similar corporations in Bombay and Calcutta in 1726. The Constitution of India has made detailed provisions for ensuring protection of democracy in Parliament and in the state legislatures. However, Constitution did not make the local self-government in urban areas a clear-cut constitutional obligation. While the Directive Principles of State Policy refer to village Panchayats, there is no specific reference to Municipalities except the implicity in Entry 5 of the State List, which places the subject of local self-government as a responsibility of the states.

In order to provide for a common framework for urban local bodies and help to strengthen the functioning of the bodies as effective democratic units of self-government, Parliament enacted the Constitution (74th Amendment) Act, 1992 relating to muncipalities in 1992. The Act received the assent of the President on 20 April, 1993. The Government of India notified the 1 June, 1993 as the date from which the said Act came into force. A new part IX-A relating to the Municipalities has been incorporated in the Constitution to provide for among other things, constitution of three types of Municipalities, i.e. Nagar Panchayats for areas in transition from a rural area to urban area, Municipal Councils for smaller urban areas and Municipal Corporation for larger urban areas, fixed duration of municipalities, appointment of state election commission, appointment of state finance commission and constitution of metropolitan and district planning committees. All States have set up their finance commissions. For conducting elections to urban local bodies, all States/UTs have set up their election commissions. Elections to municipal bodies have been completed in all States/UTs except Bihar and Pondicherry where this matter is sub-judice.

Panchayats

Article 40 of the Constitution which enshrines one of the Directive Principles of State Policy lays down that the State shall take steps to organise village panchayats and endow them with such powers and authority as may be necessary to enable them to function as units of self-govemment.

In the light of the above a new Part IX relating to the Panchayats has been inserted in the Constitution to provide for among other things, Gram Sabha in a village or group of villages; constitution of Panchayats at village and other level or levels; direct elections to all seats in Panchayats at the village and intermediate level, if any and to the offices of Chairpersons of Panchayats at such levels; reservation of seats for the Scheduled Castes and Scheduled Tribes in proportion to their population for membership of Panchayats and office of Chairpersons in Panchayats at each level; reservation of not less than one-third of the seats for women; fixing tenure of five years for Panchayats and holding elections within a period of six months in the event of supersession of any Panchayat.

Election Commission

Superintendence, direction and control of preparation of electoral rolls for, and the conduct of elections, to Parliament and state legislatures and elections to the offices of President and Vice-President of India are vested in the Election Commission of India. It is an independent constitutional authority set up in pursuance of Article 324(1) of the Constitution of India. Since its inception in 1950 and till October 1989, the Commission functioned as a single member body consisting of the Chief Election Commissioner. On 16 October, 1989, the President appointed two more Election Commissioners on the eve of the general election to House of the People held in November-December 1989. However, the said two Cornmissioners ceased 'to hold office on 1 January, 1990 when those two posts of Election Commissioners were abolished. Again on 1 October, 1993, the President appointed two more Election Commissioners. Simultaneously, law [Chief Election Commissioner and other Election Commissioners (Conditions of Service) Act, 1991] was also amended to provide that the Chief Election Commissioner and other Election Commissioners will enjoy equal powers and will receive equal salary, allowances and other perquisites. The law further provided that in case of difference of opinion amongst the Chief Election Commissioner and/or two other Election Commissioners, the matters will be decided by the Commission by majority. The validity of that law [renamed in 1993 as the Election Commission (Conditions of Service of Election Commissioners and Transactionof Business) Act, 1991] was challenged before the Supreme Court. The Constitution Bench of the Supreme Court consisting of five judges, however, dismissed the petitions and fully upheld the provisions of the above law by a unanimous judgement on 14 July, 1995.

Independence of Election Commission and its insulation from executive interference is ensured by a specific provision in Article 324(5) of the Constitution to the effect that Chief Election Commissioner shall not be removed from his office except in like manner and on like grounds as a judge of the Supreme Court and conditions of his service shall not be varied to his disadvantage after his appointment. The other Election Commissioners cannot be removed from office except on recommendation by the Chief Election Commissioner.

The Chief Election Commissioner and Election Commissioners are entitled to the same salary and other facilities, like rent free accommodation, as are provided to a judge of the Supreme Court. The term of office of the Chief Election Commissioner and other Election Commissioners is six years from the date he assumes office or till the day he attaines the age of 65 years, whichever is earlier. Plenary powers and superintendence, direction and control of the preparation of electoral rolls and the conduct of elections vested in the Election Commission under Article 324 of the Constitution are supplemented further by Acts of Parliament, namely, Representation of the People Act, 1950, Representation of tile People Act, 1951, Presidential and Vice-Presidential Elections Acts, 1952, Government of Union Territories Act, 1963, Government of the National Capital Territory of Delhi Act, 1991 and the Rules and Orders made thereunder.

Registration of Political Parties

Section 29 A of the Representation of the People Act, 1951 provides for registration of political parties by the Election Commission. A party registered with the Election Commission may be granted recognition as a National or State party on the fulfilment of certain criteria based on its poll performance. If a political party fulfills the criteria for recognition under the Election Symbols (Reservation and Allotment) Order, 1968 in four or more states, it is deemed to be a National Party. A political party recognised in less than four states is a State party in the state or states in which it is recognised as such. An exclusive symbol is reserved for a National party throughout India. In the case of a State party a symbol is reserved for it in the state or states in which it is so recognised. Such reserved symbols are allotted only to the candidates of the parties for which they are so reserved. In the year 1998, 176 political parties are registered with the Election Commission. Of these, seven parties are recognised as National Parties and 30 parties as State parties.

Electoral Reform

The Election Law has undergone some important changes with effect from 1 August, 1996 by the Representation of the People (Amendment) Act, 1996. Some of those important changes are as follows : (i) Disqualification on conviction under the Prevention of Insults to National Honour Act, 1971: Any conviction under section 2 (offence of insulting the Indian National Flag or the Constitution of India) or section 3 (offence) of preventing singing of National Anthem) of the Prevention of Insults to National Honour Act, 1971 shall hereafter entail disqualification for contesting elections to Parliament and state legislatures for a period of six years from the date of such conviction; (ii) Increase in security deposits and number of proposers: The amount of security deposit which a candidate at an election to the House of the People or a State Legislative Assembly has to make has been enhanced as a measure to check the multiplicity of non-serious candidates. In the case of an election to the House of the People, the amount of security deposit has been increased from Rs 500 to Rs 10,000 for the general candidate and from Rs 250 to Rs 5,000 for a candidate who is a member of a Scheduled Caste or Scheduled Tribe. In the case of elections to a State Legislative Assembly, the candidates will have to make a deposit of Rs 5,000 if they are general candidates and Rs 2,500 if they belong to a Scheduled Caste or Scheduled Tribe, instead of Rs 250 and Rs 125 respectively as was being previously deposited by them. The amended law further provides that the nomination of a candidate in a Parliamentary or Assembly constituency should be subscribed by 10 electors of the constituency as proposers, if the candidate has not been set up by a recognised National or State party. In the case of a candidate set up by a recognised party only one proposer is sufficient; Minimum interval between the last date for withdrawal and date of poll has been reduced to 14 days instead of 20 days; (iii) Restriction on contesting election from more than two constituencies: A candidate shall hereafter not be eligible to contest election from more than two Parliamentary or Assembly constituencies at a general election or at the bye-elections which are held simultaneously. Similar restrictions will apply for biennial-elections and bye-elections to the council of states and state legislative councils; (iv) Listing of names of candidates: For the purpose of listing of names of candidates, they shall be classified as: (a) candidates of recognised political parties, (b) candidates of registered-unrecognised political parties, and (c) other (independent) candidates. Their names in the list of contesting candidates, and in the ballot papers will now appear separately in the above order and in each category they will be arranged in alphabetical order; (v) Death of a candidate: Previously, the election was countermanded on the death of a contesting candidate. In future, no election will be countermanded on the death of a contesting candidate. If the deceased candidate, however, was set up by a recognised National or State party, the party concerned will be given an option to nominate another candidate within seven days of the issue of a notice to that effect to the party concerned by the Election Commission; (vi) Prohibition of going armed to or near a polling station: Going armed with any kind of arms as defined in Arms Act, 1959 within the neighbourhood of a polling station is now a cognizable offence punishable with imprisonment up to two years or with fine or with both. The arm found in possession of the offender shall also be liable to confiscation and licence granted in relation to such arm shall also be deemed to have been revoked. These provisions shall, however, not apply in the case of Returning Officer, Presiding Officer, any police officer or any other person appointed to maintain peace and order at the polling station; (vii) Grant of paid holiday to employees on the day of poll: All registered electors who are employed in any business, trade, industrial undertaking or any other establishment shall be entitled to a paid holiday on the day of poll. Even the daily wagers will receive their wages for the said day. But this will not apply in the case of an elector whose absence may cause danger or substantial loss in respect of the employment in which he is engaged. Any employer contravening the law shall be punishable with fine upto Rs 500; (viii) Prohibition on sale etc., of liquor: No liquor or other intoxicants shall be sold, given or distributed at any shop, eating place, hotel or any other place, whether public or private, within a polling area during the period of 48 hours ending with the hour fixed for the conclusion of poll. Any person contravening the law shall be punishable with imprisonment upto six months or with fine upto Rs 2,000 or with both; and (ix) Time limit for holding bye-elections: Bye-elections to any House of Parliament or a State Legislature will now be held within six months of occurrence of the vacancy in the House. However, this stipulation will not apply where the remainder of the term of the member whose vacancy is to be filled is less than one year or where the Election Commission, in consultation with the Central Government, certifies that it is difficult to hold the bye-election within the said period.

The President issued an ordinance on 5 June 1997, called the Presidential and Vice-Presidential Elections (Amendment) Ordinance, 1997 whereby number of proposers and seconders for contesting election to the office of the President of India was increased to fifty each in place of ten; number of electors as proposers and seconders for contesting Vice-Presidential election was increased to 20 each in place of five. The amount of security deposit has been increased to Rs 15,000 in place of Rs 2,500 for contesting election to the offices of President and Vice-President.

An ordinance was promulgated to amend section 60 of the Representation of the People Act, 1951 for inserting a new sub-section

(c) for making provisions for voting by certain classes of persons through postal ballot. The provision was meant to facilitate right of franchise by migrants from Kashmir valley in view of the then impending General Elections to the twelfth Lok Sabha.

Reservation of Seats

The Constitution (Fifty-seventh Ammendment) Act, 1987 provides for determination of seats reserved for scheduled tribles in Arunachal Pradesh, Meghalaya, Mizoram and Nagaland by amending Article 332 of the Constitution. Under the Representation of the People (Ammendment) Act, 1987, 59 out of 60 seats in Arunachal Pradesh, 55 out of 60 in Meghalaya, 39 out of 40 in Mizoram and 59 out of 60 in Nagaland were reserved for scheduled tribes. Election Commission has identified 55 reserved seats in Meghalaya, 59 in Nagaland, 59 in Arunachal Pradesh and 39 in Mizoram.

After the Constitution (Sixty-ninth Amendment) Act, 1991, the Union Territory of Delhi became the National Capital Territory of Delhi from 1 February 1992. A legislative assembly with 70 seats was provided in place of 56 metropolitan council seats. Under the Government of National Capital Territory of Delhi Act, 1991, seven out of 70 seats were reserved for scheduled cases.

The Constitution (Seventy-second Amendment) Act, 1992 provides for determination of seats reserved for scheduled tribes in Tripura by amending Article 332 of the Constitution. Under the Representation of the People (Amendment) Act, 1992, three more seats were reserved for STs. The total number of seats reserved for STs in Tripura became 20 instead of 17 as it was prior to the amendment.

In pursuance of Section 4 of the Jammu and Kashmir Representation of the People Act, 1957, the order made by the Delimitation Commission under clause (d) of sub-section 3 of section 4 of the Act in respect of delimitation of Assembly Constituencies in the State of Jammu and Kashmir was published in the Jammu and Kashmir Government Gazette on 27 April 1995, the seats were increased from 76 to 87 in which seven seats are reserved for scheduled castes.

Electronic Voting Machines

The Representation of the People Act, 1951 was amended to facilitate use of electronic voting machines in elections by inserting section 61 A with effect from 15 March 1989.

General Elections

First general election in India on the basis of adult suffrage was held in 1951-52. This was a simultaneous election both for the Lok Sabha and all state legislative assemblies (including Part A, B and C states). Second general election held in 1957, shortly after reorganisation of states, was also a simultaneous election. In third general election in 1962, elections to state assemblies of Kerala and Orissa became out of step with general election with the result that simultaneous elections could not be held in these two states. Similarly in 1967, simultaneous elections could not be held in Nagaland and Pondicherry along with fourth general election to the Lok Sabha. After 1967, election to most of the assemblies had to be held earlier than normally due with the result that Orissa, Tamil Nadu and West Bengal had simultaneous elections to the Lok Sabha and state assemblies at fifth general election held in 1971. In 1977, Kerala was the only state where election to legislative assembly was held simultaneously with sixth general election. When seventh general election was held in January 1980, election to constitute new assemblies were held simultaneously only in Manipur, Arunachal Pradesh, Goa, Daman and Diu and Pondicherry. Polling for eighth Lok Sabha election was held on 24, 27 and 28 December 1984 in 20 states and nine union territories except Assam and Punjab. Election for assemblies of Tamil Nadu, Manipur, Arunachal Pradesh and Goa, Daman and Diu were also held simultaneously.

The term of eighth Lok Sabha was upto 14 January 1990. General election was held on 22, 24 and 26 November, 1989 to the ninth Lok Sabha except Assam where revision of rolls was not completed by that time. Simultaneous election was also held to constitute new assemblies in Andhra Pradesh, Goa, Karnataka, Sikkim and Uttar Pradesh.

The ninth Lok Sabha did not serve its full term. The House was dissolved on 12 March 1991. Elections to the 511 seats of tenth Lok

Sabha, except six seats in Jammu and Kashmir and 13 seats in Punjab, were held on 20 May, 6, 8, 12 and 15 June, 1991. Elections were also held to the state assemblies of Assam, West Bengal, Uttar Pradesh, Haryana, Kerala, Tamil Nadu and Pondicherry. Bye-election to 15 Lok Sabha seats and 56 assembly seats in 14 states was held on 16 November, 1991. Elections to the Lok Sabha and assembly seats in Punjab was held on 9 February, 1992.

The term of the tenth Lok Sabha was up to 8 July, 1996. The general election to the eleventh Lok Sabha was held in 27 April, 2, 7, 23, 27 and 30 May, 1996. Simultaneous elections were also held to constitute new assemblies in Kerala, Tamil Nadu, Haryana, West Bengal, Assam and Pondicherry. Assembly election in the State of Jammu and Kashmir was held on 7, 16, 21 and 30 September 1996 after a gap of nearly nine years. The election to constitute new assembly in Uttar Pradesh was held on 30 September 3 and 7 October, 1996. The election to constitute new Assembly in Punjab was also held on 7 February, 1997.

The term of the eleventh Lok Sabha was up to 4 December, 1997. The general elections to the twelfth Lok Sabha were held on 16, 22, 28 February and 7 March, 1998 for 539 Parliamentary Constituencies.

7

SCIENCE AND TECHNOLOGY

Science

India has made wonderful contributions to the world of science. Ancient Indians were far ahead of the world in the sciences of mathematics, medicine, astronomy, chemistry, metallurgy and linguistics.

Mathematics

In mathematics, Indians have contributed the decimal system, place notation, the numbers from 1-9 and the ubiquitous 0.

It is amazing, but the western advances in computer science, satellite echnology and artificial intelligence would not have been possible without these gifts from India. Indians probed pure numbers, devised numerical notation system in algebra. Aryabhatta, the great Indian mathematician calculated Pi at 3.1416 and discussed subjects like numerical square and cube roots, arithmetical factors and algebraic identities. He is also credited with the emergence of trigonometry through sine's.

Around 1500 AD an untutored mathematician from Kerala called Madhava developed his own system of calculus based on his knowledge of trigonometry. This is significant considering Newton and Liebnitz came more than a century later. The twentieth century mathematical genius, Srinivas Ramanujan (1887-1920) developed a formula for partitioning any natural number, expressing an integer as the sum of squares, cubes or higher power of a few integers.

Astronomy

Ancient Indians' interest in astronomy probably was an extension of their religious preoccupation. They focussed their mathematical attentions on the stars and devised ways to square the circle and circle the square, in an attempt to construct sacrificial altars for their gods.

In his treatise on mathematics called *Aryabhatiya,* Aryabhatta had discussed spherical astronomy which led to the development of spherical trigonometry. He had also discovered that the earth's shadow was responsible for the waxing and waning of the moon and also concluded that the earth rotated on its own axis and that the moon rotated round the earth.

Medicine

Among all sciences, medicine was the most advanced considering the fact that the Atharva Veda, (about 1500 BC) one of the four ancient scriptures of India, mentions certain herbs with curative powers. Several ancient texts on physiology identified factors as those which determined good or ill health. The traditional Indian medicine *Ayurveda,* focused on longevity and prescribed several remedies for the same. Gold, silver, mercury, garlic and honey are described as having specific curative powers in the vast treasury of India's pharmacopoeia. medical texts of ancient India. Some of these have subsequently been credited with the same curative powers by modern scientists.

Yoga stressed the holistic approach to health based on proper diet and physical exercise. Today, even modern scientists accept its efficacy as one of the most efficient ways to stress-free, healthy living.

Charaka, the great Ayurvedic physician of the 1st Century AD, had written *Charaka Samhita,* the first scientific medical text. Charaka's work consisted of eight chapters devoted to pharmacology, diet, treatment of major diseases like fever, diarrhoea, consumption, leprosy and tumour among others. He also wrote on such specialised subjects as pathology, embryology and anatomy.

In the fourth century, came Sushruta, who is considered the father of surgery. In his treatise *Sushruta Samhita,* he lists about 125 surgical instruments used by him in his surgeries, details methods of operations among other subjects. In his time he is believed to have performed Caesarean sections, done plastic surgeries and set compound fractures.

Veterinary science was another field which had been developed well in ancient times, with hospitals for horses, elephants and cattle. A special branch of Indian medicine was devoted to the treatment of elephants and was called *Hastyayurveda.*

Physics

Indian physicists down the ages have contributed a lot to the study of physics.

Sir Jagdish Chandra Bose (1858-1937) was one of the first scientists to find a link between botanical ad physical sciences. His Crescograph could detect plant growth of one-millionth of a millimetre per second.

Sir C.V. Raman (1888-1970) discovered that when a beam of light passes through a liquid or gas, it is scattered and the frequency of some of the scattered light is changed. This change is called Raman Effect. He got the Nobel Prize for physics for this discovery in 1930.

Dr. Homi J. Bhabha (1910-1966) discovered the 'Cascade' theory of cosmic ray showers.

Dr. M.N. Saha (1893-1956), unravelled some of the mystery of the outer space through his study of stellar atomic ionisation.

SOFTWARE INDUSTRY

Introduction

The Software Industry in India has been growing at over 50% per year since 1991. Software exports were around US $ 1.75 billion in 1997-98, or roughly 5 per cent of merchandise exports, according to a study conducted by the National Association of Software and Service Companies (Nasscom), the apex body of the software industry in India. While exports in other areas slowed down, this sector remained buoyant with exports growing at 58% in 1997-98.

In the 1998-99 budget, the government underlined the importance of Information Technology for the country as it is the fastest growing sector of the Indian economy as indeed of the world economy. It has tremendous potential for the generation of employment, incomes and export earnings. The government has set itself a target of making India a Global Information Technology Power and one of the largest generators and exporters of software in the world within ten years.

A National Information Technology Task Force, headed by the Deputy Chairman of the Planning Commission, Mr. Jaswant Singh was set up to formulate a National Informatics Policy. The government had already declared this sector as a thrust area giving it special incentives and encouragement. The commitment of the government to this sector is clear from the pace at which the work is being carried out. The Task Force on IT was established on May 22, 1998. It came out with its first 'action plan' report on July 5 and is expected to follow up with a second report in August. With the dynamic and IT-savvy Andhra Pradesh Chief Minister, Mr. Chandrababu Naidu, as its co-chairperson, the center has shown it is indeed keen on replicating the experience in the state of Andhra Pradesh nationwide.

The question: Despite India's success in the software industry, its share of the world's $360-billion software and services industry is less than 1%. Government of India has recognized 'Software' as a 'Thrust' area, but what can be done to improve India's global market share of the software industry? This paper examines the Indian software industry to provide policy options that will help bridge the gap between the present Indian position and the potential that could be harnessed for India in the software sector. That is the central question addressed in this paper.

Present Position: In the fiscal year 1997-98, the software industry in India is estimated to be worth Rs. 65 billion or US$1.8 billion, and if in-house development that takes place at large commercial and corporate end users is added, then the total figure is estimated to be around US $ 2.2 billion. These revenue figures are at Indian rates and wages, at U.S. rates and wages, this industry is estimated to be worth more than US $100 billion! This is indeed impressive when compared to ten years ago, when this industry was valued at no more than 300 million rupees. NASSCOM points out that software development and services are the fastest growing industry in India. While globally this sector is expanding at 12% every year, India has been leaping ahead with 50% annual growth since 1991. According to a recent study by NASSCOM the industry is poised to earn annual revenues of more than U.S. $6 billion by the year 2000.

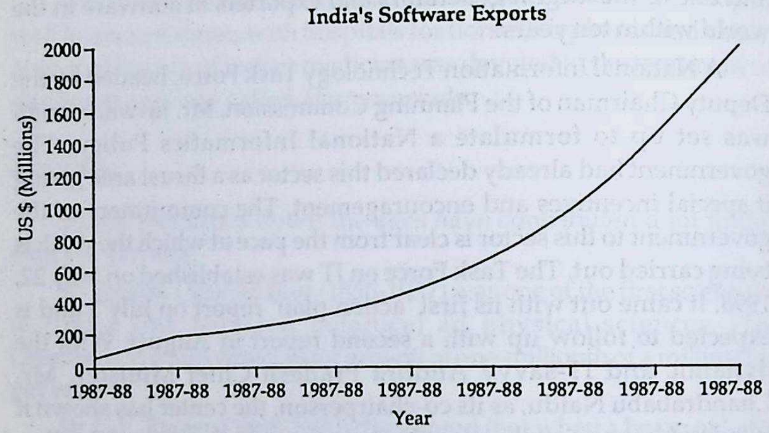


Figure 7.1: Growth of India's Software Exports

India's Global Market Share in Software

- India's software industry can be divided into the export sector and the domestic sector. Although related, the two have different profiles and resultant issues. Unlike historical cases of growth industries where typically growth is pushed by the domestic sector, in India's software case, exports have been growing at a higher rate and for a longer period with different implications for policies in this sector. Growth rates in this sector were,
  - In software exports, the rate of growth last year was 55.04%, earning $1.75 billion.
  - In the domestic market the growth rate was 48.9%.

- However, these impressive figures at the country level pale when seen at the global level where the Indian market share of the world's $360-billion software and services industry is 0.5 % of the total. This is too low. While Indian software producers are marketing to the top 20 % of the global firms, the type of work being done is at the lower end of the value chain.
- While the creation of the Software Technology Park of India (STPI) has created space and opportunity for software entrepreneurs there is no forum where entrepreneurs, policy makers, strategists, marketing experts or industry associations can come together to brainstorm on how India collectively can move up the value chain in the software industry at the global level. Networking in this context is needed between government and local software firms and between the firms as well.
- The Indian view:

  Indians point out that instead of looking at India's total global market share, if the specific areas where Indian companies are doing major work is taken into account, what is termed as their "addressable market segment", for example services, such as the Y2K work, then the Indian share increases to about 16.7% (in 1996) of the global market. If transfer pricing is taken into account then the value of work being undertaken in India is worth even more.

  Leaders of the Indian software companies point out that there is a huge market in global information services which Indian companies are tapping into. However, the need is to tap into it in a bigger and more systematic way. The bigger and more established companies are moving into what they call "premium services" where they are raising the bar on what they charge, quality of work, time taken, etc. The lower end jobs coming to the smaller companies and start-ups. There is work and room for all to grow in this industry.

  They further point out that Indian companies are working with only about 1/5 of the big global companies. There is therefore a wide market (i.e., 4/5th of the market) that has not been tapped by Indian companies. There is a need to approach the companies that have no India presence. Industry and government could work together on a marketing strategy (a point we re-visit later) for Indian software companies in the next few years.

For skeptics who point to the low end of the work being done in India, Indians point to the next major opportunity for the Indian software industry, i.e., EMU coming out of the European Monetary Union. The Gartner group estimates that the software conversion costs for EMU in Europe alone would exceed $100 billion. The European Banking Federation estimated that its member banks will need to spend at least $ 7.5 billion implementing EMU. The Indian software companies already capitalizing on the opportunity arising out of the Y2K conversion can expect the EMU to be the next major opportunity.

Vision

Estimates vary, but most agree that the software industry in India is targeted to reach Rs. 175 billion or US $ 5/6 billion by the year 2000. Dewang Mehta, Executive Director of NASSCOM says, "India will do to software what Japan did to the car" Asiaweek (1996).

The report of the Task Force on IT and Software Development has resolved to make India a Global IT Superpower. With the Global IT industry reaching a potential 2 trillion dollar industry, the report sets a target of $50 billion in annual export of IT Software and IT Services by the year 2008. The report further states that the government should create a "policy ambiance" to achieve this target.

The country needs at least a quarter of the market to become a global force, says Nandan Nilekeni, Deputy Managing Director of a local firm Infosys Technologies. "We're very far from that [target] right now," he says. "We have to develop and market a brand, to sell on expertiseand not on cost." Can India make that great leap? Yes, says Vikram Shah, Managing Director of Novell in India: "The Internet has given everyone a level playing field. In 15 years, India will be a major player." He sees the Net as a visa-free way for software developers to do business worldwide.

Mr. Shyamlal Ghosh, former Secretary of Department of Electronics says, "There has been an on-going shift in the software development from on-shore to off-shore. Now, we need to re-orient our strategies and make efforts to shift towards development of products and packages. This should be our agenda for the next five years." The vision of becoming a "software superpower" however needs the creation of sound policy environment and developing marketing expertise that will lead India to increase its global market share from 0.5% at present to much higher levels. The recent recommendations of the Task force on Information Technology (discussed later) are welcome, but action on these recommendations is vital for further growth of this industry.

Background Information

There has been extensive government intervention in the IT sector in India. Through the 1970's the government acted as a regulator of private sector and producer of computing products and services. In the 1980's the regulatory role began to get reduced and the state became more of a promoter of production by the private sector in this industry.

In 1971 the Department of Electronics (DOE) and the Electronics Commission were formed. The Commission was responsible for policy formulation and the DOE for day to day implementation of policies. The two institutions developed a professional staff that was capable of providing the necessary technical support for its new tasks. Over time the government delegated more and more powers of regulation and administration of the IT policy to these two organizations.

One of first steps taken by the Electronics Commission was the establishment of a Santa Cruz Electronics Export Processing Zone (SEEPZ) near Bombay with an offer of various incentives (including tax breaks, cheap land, duty free import of inputs and a streamlined permit process) to establish export units. The software sector was one of the first to be liberalized with policy liberalization initiatives being announced in the mid-1980's with the New Computer Policy being passed in 1984 and the Policy on Computer Software Export, Software Development and Training in 1986.

Since 1991 this sector has been further liberalized aiding in the rapid increase in both exports and domestic growth of the software industry. Subsequent government schemes like, Export Processing Zones (EPZs), the 100% Export Oriented Units (EOUs), Electronics Hardware Technology Parks (EHTPs) and Software Technology Parks of India (STPIs) have all helped businesses in accessing the concessions for this sector.

Economic Liberalization in this Sector

- Key Policy Changes targeted at the software sector.

  Liberalization of this sector was started in 1984 with the Government of India announcing its Policy for Computer Software in 1986, with the main objective of promoting software sector in the country and broadening the base of computer application areas. It also began a process of simplifying procedures for setting up software units in India.

- Concessions

  No customs duty on imports of capital goods

  No excise duty

  No license required for import of capital goods, raw materials, components, consumable, etc.

- Tax Incentives

  No tax on exports profits. Companies have to fulfil an export obligation.

  Five year tax holiday within the first eight years of operations. There is plan to extend this to ten years.

  Reduction of custom duty on software to zero and exempting the software exporters from

  Minimum Alternate Tax (MAT) in 1997.

- Infrastructural support

  Since 1986 the government has started various schemes which were targeted at helping entrepreneurs start software businesses with special incentives. Some of these are the EPZ, the 100% EOUs, the STPI and the EHTPs. Each of these has provided improved data communication facilities and single window clearance of approvals so that businesses may start operations in a matter of weeks. We shall look at the STPI scheme in some detail below.

- 1998-99 Union Budget

  In response to a demand from software companies, to offer attractive incentives to retain their human resources, the government announced that they would be allowed to offer stock option schemes to their Indian employees linked to American Depository Receipts and/or Global Depository Receipts (ADR/GDR) issued abroad, under which their employees will be eligible for ADR/GDR stock options. "In recognition of the excellent work being done in this sector," the government decided to formulate a special scheme to allow such stock options for the software sector. This has been done to deal with manpower issues the industry is at present facing as qualified and trained people leave the Indian companies for attractive opportunities abroad. Uncertainty over taxing the stock option for Indian employees may create trouble with this concession.

Some of the fiscal proposals in the 1998 budget:

- Duty on Computer Components / parts like floppy disk drives, hard disk drives, CDROM reduced from 12% to 5%.
- Cathode rays for computers reduced to 5%.
- Telecom equipment duties cut to 20%.
- Telecom software duties down to 30% from 40%.

Foreign Exchange Restrictions Act (FERA) to be replaced by Foreign Exchange Management Act (FEMA) – which would directly benefit software companies.

- To attract foreign investment into the country some administrative simplifications have been announced for both foreigners as well as Indians. Prime among them is the appointment of a monitoring officer for every project over Rs. 1000 million (US $ 24 million).
- As of July 16, 1998 the Finance Minister further announced that custom duties on all types of software are being removed.
- Indian Copyright Act.

Recent Amendments to the Indian Copyright Act have made the Indian laws almost the toughest in the world, making software piracy laws world class and consequent abuse of it has been reduced.

- Concession by State governments

  Most State governments have announced or are in the process of announcing big concessions to the IT sector. Andhra Pradesh (AP) is a significant example, where the dynamic and computer literate Chief Minister, Chandrababu Naidu, has embarked on a ambitious plan to make AP computer networked and attract major global companies to his state. Microsoft's decision to set up operations in Hyderabad, the state capital, has been a decisive win for him and his state. More recently Maharashtra began a major push for the IT sector announcing tax and financial incentives to start software companies in the state. Karanataka, already the country's leader in software, with Bangalore, India's Silicon valley, situated in the state, is announcing initiatives given the competition from other states to woo software companies and foreign investment away from the state. It recently announced opening of two more STP centers in Hubli and Mangalore. Orissa has also followed these examples.

Government as Facilitator

- The Government from time to time has set up expert committees to give impetus to software development for exports as well as for the domestic market. From such brainstorming, various policy reforms and changes have emerged for this sector. The setting up of STPI is a good example. The Task Force on IT and Software Development set up by the BJP-led government in May 1998, is the most recent example.
- Organizations and Associations

  The two main organizations that have emerged in assisting the software sector in its development are the Electronics and Computer Software Export Promotion Council (ESC) and the National Association of Software and Service Companies (NASSCOM).

Software Technology Park of India (STPI)

The intention of the government to promote software had been made clear in the 'New software policy of 1986,' but despite the intentions exports had not taken off. From various policy discussions within the government it emerged that there was a need for creating a centralized in house infrastructure scheme which could be managed, regulated and monitored by people who spoke the same language as the software exporting units.

It was also recognized that the needs of the software industry were different from generic exporters. The unique requirements of this industry, were firstly, high speed data communication link, the backbone of this industry, with which software units can connect, communicate and transfer their work to clients all over the world. Secondly, various time-consuming approvals, clearances and certificates needed from the government. In an information age where technology is rapidly changing delays in getting approvals could cost entrepreneurs loosing orders. Hence, it was noted that this sector should be provided with a single window clearance for all administrative requirements. Thirdly, entrepreneurs especially the small to medium sized units needed various services like space, finance and other infrastructural support. Thus the need for an entity that could deal with all these requirements almost became a necessity.

From this new thinking the concept of STPI came up. The first software technology park was opened in Pune in 1990 and within a few months two other parks were opened in Bangalore and Bhuvaneshwar. In June 1991 STPI came into existence and four more parks were opened as well as the other parks were brought under its operations. STPI was formed with a very clear mandate – to help in the setting up of software firms. It is an autonomous organization with delegated powers under the Department of Electronics (DOE), Government of India.

In 1992 the World Bank report on India's software competitiveness further brought to light certain suggestions. To promote Indian Software a 'Development Board' should be set up whereby decisions could be taken much faster for this industry. The concept of single window was started and STP was empowered to provide the single window services for this industry. The power to give all required clearances and approvals was delegated to the Director of the STP's.

STP's have set up earth stations through which it provides high speed data communication (HSDC) facilities on rental basis for software units. The availability of wide band high speed data communication (HSDC) facility has helped the growth of off-shore development centers and provided high skilled job opportunities to Indians. 24 hour virtual office as well as all government concessions were routed through the STP. New services have been provided by STP as and when the need for them has arisen. It began to assist companies with providing space, since most new entrepreneurs starting out do not need to rent large space in the beginning, STP tries to provide what they call "incubators" from where entrepreneurs find their feet and can take off on their own.

STP's unique role however is in getting approvals for a project and getting an entrepreneur started. In financial terms, projects where the amount involved is less than Rs.100 million (US $ 2.4 million) and the proposal is viable, approvals are generally given in a few hours across the table with the Director of a STP. When the project cost is more than Rs.100 million (US $ 2.4 million) then the proposal needs more review and typically takes between three to four weeks. In cases where foreign investment involved is less than 51% of the total project cost decisions are made and recommended at the level of the Director of the STP. Where it is more than 51%, those cases are sent for approval to the Foreign Investment Promotion Board (FIPB).

STP also monitors software exports. All companies when exporting software from India are required to fill a form called the 'Software Declaration form.' In this way STP's monitor the exact software exports, every month, from STP as well as non-STP units. These forms have to be filed with the RBI. The power to sign these forms has also been delegated to STP directors.

STP has over the years stepped in to provide various services as and when they have been needed. They try to connect foreign investors with Indian software developers. They also help in getting finance by trying to stand between the entrepreneur and lenders and in certain cases give financial guarantee on behalf of the entrepreneur. The number of STP units have grown from 164 to 667.

STPI has been very successful, as a single window solution in providing facilities to set up units and export software from India. "There are cases sometimes when an entrepreneur does not want any of the customs, excise, income tax, or revenue benefits, or even the HSDC facility because they can get dial up facilities from Videsh Sanchar Nigam Limited (VSNL), but they still want to be a STP unit because of this single window solution to other issues, like dealing with government and RBI. If they have any doubt or need clarification they can come to the STP," says Dr. Ritu Singh of STPI in New Delhi.

INDIA: A SOFTWARE DESTINATION

Indians argue that their software companies are providing a competitive edge through cost and quality advantages, use of state-of-the-art skills, high reliability, and the ability to save time on projects. They quote no less an authority than Microsoft's Bill Gates who on a visit to India in 1997 stated that "India is likely to be a software superpower in the coming years." We highlight some of the reasons for this competitive edge in India.

The Indian Edge

A number of western companies seriously consider India as the first option when they have to outsource software development and services. In the case of American companies the figure may be as high as 82%. This showed up on a survey conducted by The World Bank, to understand the preference of vendors in software development as well as outsourcing. As per the Nasscom study, more than 158 companies out of the Fortune 500 companies outsourced their software requirements from India.

Among the global companies which already have operations in India are international software giants like IBM, Microsoft, Novell, Oracle, AT&T, Fujitsu, Motorola, Digital and Hewlett Packard. Moreover, many manufacturers, including Philips, General Electric, IBM, Reebok, Fujitsu, British Aerospace, General Motors and Sears are keeping ahead of their rivals because of the competitive advantage conferred on them by some of the best software companies in India.

Large Manpower Pool

India today has the second-largest English-speaking scientific manpower pool in the world second only to the U.S. It also has a growing bank of 3.5 million technical personnel. There are over 1,670 educational institutions including engineering colleges, technical institutes and polytechnics that train more than 41,000 people annually. This is in addition to the graduates coming out of the prestigious Indian Institute of Technology (IIT). The quality of technical training is comparable to the best in the world.

High Growth

The Indian software sector has grown at an compounded annual growth of almost 55% between 1990 and 1997. The large, technically skilled manpower pool has fueled this growth which has expanded almost twice as fast as the world-leading U.S. software industry did during the same period, though from a smaller base. Exports have spiraled more than 30 fold in just nine years between 1989 and 1998 from Rs. 0.9 billion (US $ 56 million) in 1989-90 to Rs. 65300 million (US $ 1.8 billion) at present.

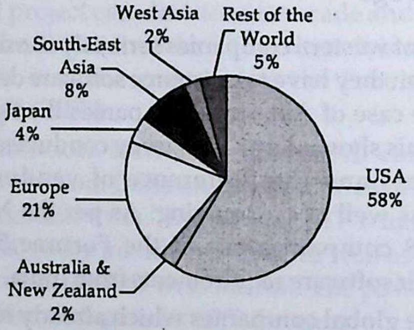


Figure 7.2: Export destination of India's software

A Nasscom study indicates that in 1997-98, about 73 companies exported software worth more than Rs.100 million (US $ 2.4 million) compared to about eight in 1992-93. Out of the total software exports of Rs. 65300 million (US $ 1.8 billion) from India during 1997-98, almost 58 per cent went to the USA, 21 per cent to Europe, eight per cent to South-east Asia, four per cent to Japan, two per cent to West Asia and five per cent to the rest of the world.

Performance

A look at the performance of the Indian software export industry shows that this industry has grown as well as diversified and is committed to providing high-quality and state-of-the-art technologies to today's global information industry. India's strength lies in its ability to learn and deliver on a range of software development projects and/or in MIS environments. These include Business Process Re-engineering, System Migration, Maintaining Legacy Systems, System Integration, CBT Applications, Multimedia, Networking, Client-server Architecture, Remote Maintenance etc.

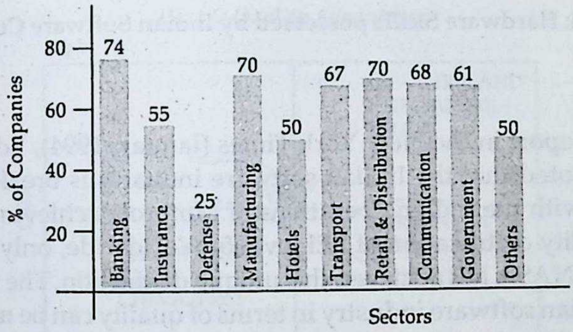


Figure 7.3: Segment wise break-up the software industry

State of the Art Technologies

Over the past few years, a number of trends have emerged in the Indian software industry. On the technical side they encompass the use of Computer Aided Software Engineering (CASE), Fourth Generation Languages (4GLs) in software development; the adoption of Graphical User interfaces (GUis) as the standard user interface; the move toward open systems; the use of Object-oriented programming techniques; the emergence of Client-server computing and the use of formal software development methodologies. A recent survey conducted by NASSCOM, showed that more than 65% of Indian software companies use the above state-of the-art technologies in their software development process using latest hardware platforms.

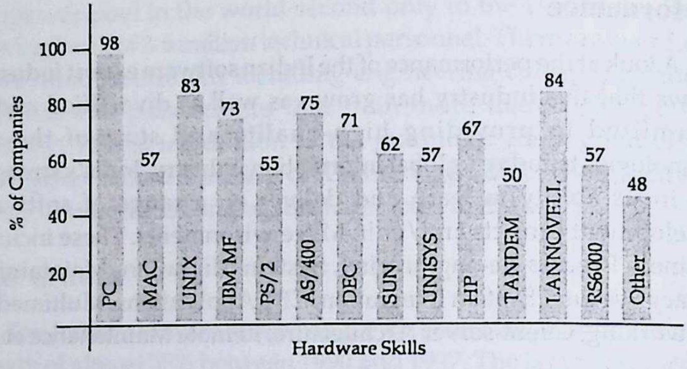


Figure 7.4: Hardware Skills possessed by Indian Software Companies

Quality

In a report in the New York Times (January1994), Edward A. Gargan noted that the Indian software industry is breaking new ground, with the Indian operations of Motorola achieving world-class quality certification of SEI level 5. Worldwide, only the IBM project at NASA has achieved this unique distinction. The maturity of the Indian software industry in terms of quality can be measured from the fact that already 50 Indian software companies have acquired ISO 9000 certification and about 97 more companies are in the pipeline. The Indian software industry has the maximum number of ISO 9000 certified companies in the world for the software sector. The quality standards in Indian software companies are so high that users are choosing to outsource to India, mainly on quality considerations.

Table 7.1: Quality Certification of Indian Software Companies

Quality Certification	*No. of Companies*
Already acquired ISO 9000 or equivalent certification	50
In the Process of Acquiring Certification	97

Quality Certification	*No. of Companies*
Plant to acquire in the next two years	200
No plans at present	34

Source: Nasscom, 1998.

Costs

On the other side of the success of Indian software industry is the reduced man power cost. Besides the quality of software being developed in India, foreign companies have realized that Indian conditions are favorable for reducing the overall cost of production. These factors have forced foreign companies to forge alliances with Indian companies to gain an upper hand in the global market.

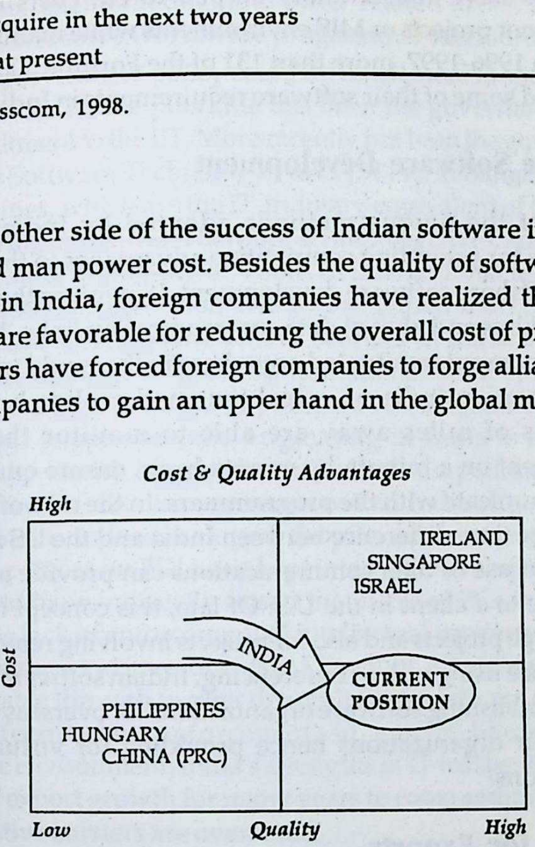

Cost & Quality Advantages

Figure 7.5: The Indian position in the quality spectrum

Outsourcing

Outsourcing is becoming a strategy for forward-thinking IS managers. It is no longer merely a means for reducing costs but also a tool for adding value to business. It enables organizations to concentrate on their core business, carry out business reengineering, and provide information that is valid, timely, and adequate to assist decision making at the management level and quality and cost control at the middle and lower levels. Organizations that have outsourced from India have discovered that Indian software companies have substantially helped to cut costs in software development projects or MIS environments while maintaining high quality. In 1996-1997, more than 131 of the Fortune 500 companies outsourced some of their software requirements in India.

Off Shore Software Development

One of the unique methods adopted by Indian software companies for providing competitive advantages to their clients is through offshore software development. It involves the use of high speed (64 kbps and above) data communication links. This enables the use of computers situated anywhere in the world to be used by programmers in India on a real-time and on-line basis. Clients thousands of miles away are able to monitor the software development on a minute-by minute basis, ensure quality checks and communicate with the programmers. In the case of the U.S., as the average time difference between India and the US is 12-hours, this kind of use of data communications can provide a virtual 24-hour office to a client in the U.S. Of late, this concept has worked well for large projects and also for projects involving remote software maintenance using video conferencing. Indian software companies are also establishing software organizations for overseas companies, within their organizations hence providing for virtual software organizations!

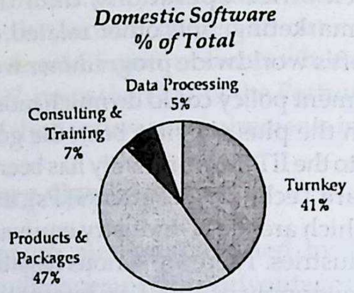
Platform for Exports

These developments make India a sound platform for software exports for major global players as well as Indian companies. The 1998 Global Competitiveness Report of the World Economic Forum confirmed the high international opinion of India's engineering and scientific capacities, the products in part of India's long-term investments in the Indian Institute of Technology (IIT). India's prowess has been most evident in the software sector, where worldclass programmers operate in technology centers such as Bangalore, Delhi, Mumbai, and Chennai. Operating through satellite links, Indian programmers are providing IT support to U.S. and European firms in areas ranging from software development and maintenance, back-office operations, data transcription and transmission, telemarketing, and other related areas. Around 10 percent of Microsoft's worldwide programmer workforce is Indian.

Indian government policy could do much more to spur software export growth. On the plus side has been the government's long-term commitment to the IIT. More recently has been the government's support for Software Technology Parks (STPs), in Bangalore, Pune, and other cities, which are the IT-industry equivalent of the EPZs in manufacturing industries. There are serious negatives, however. The continuing state monopoly of VSNL in international telephony as well as in internet provision within the Indian market seriously raises the costs of telephone and IT services in India, and will do considerable damage in India's international competitiveness in the IT sector unless rectified (a point we re-visit later on). Cost of international telephone calls originating in India is among the highest in the world, largely due to lack of competition. Physical infrastructure for data transmission within India (e.g. fiber optic cables) remain underdeveloped despite some recent progress. Restrictive policies on FDI have kept international chip makers out of India, and have indirectly raised the prices of PCs in the Indian market. The lack of enforcement of intellectual property laws most likely inhibits inward investments in IT sectors. All of these problems are remediable through further deregulation of telecom and FDI, as well as effective law enforcement in a more liberalized and competitive environment. India's strengths in IT will be an important bulwark of export growth for many years to come assuming that the administrative barriers are overcome.

Development of Software Industry

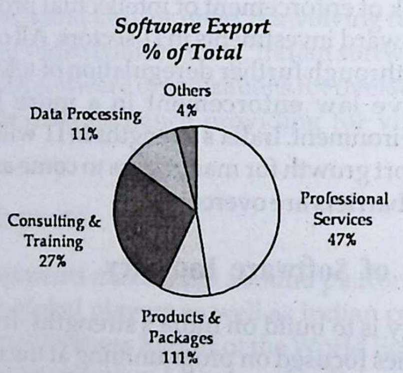
The strategy is to build on India's strengths. In the early 1980s, Indian companies focused on programming at the clients' site, most often in the U.S., Europe and Japan. That meant a lot of problems with visas and pay levels. The U.S., in particular, required the guest workers to be paid the same as their American counterparts, which cut into the profit margins of the Indian companies. Today, the reworking of off-the-shelf and customized software to fit the client's needs is done in India through high-speed data links. Local companies such as market leader Tata Consultancy and No. 2 HCL Group have whole teams serving particular clients.



Domestic Software
% of Total

Figure 7.6: Sector-wise distribution of Domestic Software

For many years, the domestic software industry in India was lagging behind the growth of the export industry. However, this situation is fast changing. In the past three years, the domestic software industry has started to show maturity and has achieved high growth rates ranging from 40-50%. Computerization in India banks, railways, airlines and manufacturing sectors means more opportunities to IT companies in India and overseas.



Software Export
% of Total

Figure 7.7: Sector-wise distribution of India's Software Exports

Once again as the Report of the Task Force on IT has rightly recommended there is a great need for spreading access to computers and the Internet all over the country. If the middle class could own computers and get access to an Internet connection easily it would bring them closer to the information age. Since software products cannot be developed in a vacuum, such access and familiarity will bring in a new culture which could generate growth for this industry. Hence, it may be best not to insulate the Indian market in this context.

Table 7.2: Break-up of Software Activity

Software Activity	*Domestic Software*		*Software Export*	
	Rupees Million	*Percent of Total*	*Rupees Million*	*Percent of Total*
Turkey	6800	40.7%	–	–
Professional Services	–	–	12146	48.2%
Product and Packages	7300	43.7%	3024	12.0%
Consultancy and Training	1300	7.8%	6500	25.8%
Data Processing	1200	7.2%	2520	10.0%
Others	100	0.6%	1010	4.0%

Source: Nasscom 1998.

Infosys Technologies: A Success Story

The experience of many who have started software firms has been sweet. Infosys Technologies was started in 1981 by Narayana Murty and six partners with a total of Rs. 10,000 (US $ 1,333). That sum is worth over Rs.10,000 million (US $ 250 million) today. In 1997, the revenues of the company were Rs. 2,600.37 million (US $ 65 million) with a net profit of Rs.600.36 million (US $ 15 million). Its main facility located in the Electronics City in Bangalore boasts of 200,000 sq. ft of landscaped area and 140,000 sq. ft of office space. Murthy plans to add another 360,000 sq. ft, hire another 4,500 software professionals and invest Rs.750 million (US $ 17.8 million) toward the company's growth. It currently employs 2,186 people of which 484 employees have impressive stock options plan in the company. Its market capitalization today is Rs.37200 million (over US $800 million), bigger than the combined empires of B. K. Birla and Nusli Wadia (Rs 30,150 million or US $ 717 million).

This growth was not easy. It took a lot of hard work, dedication and commitment from the top managers at Infosys. From 1981 to 1992 the company struggled. Sometimes it took 8 to 12 months and

15 to 20 trips to Delhi to import a computer worth $15,000. The country lacked data communications infrastructure and procedural bottlenecks slowed growth. In those days onsite software programming was prevalent – an activity in which Infosys had little interest but had to do it for survival. Infosys started out with reengineering a software package for a software house in the US. But they kept their eyes on exports, "we knew from day one that the export market was the main opportunity in software," says Murthy. Business India, (1998).

The economic liberalization of the Rao government made a paradigm shift for the company. Murty recounts the main changes for his business. First, a letter of credit for import (up to Rs. 20 million, US $ 1.8 million)) could be opened without going to a government agency. Second, by abolishing the office of the "Comptroller of Capital Issues," equity became a viable financing option. Third, Indian companies were allowed to open marketing and sales offices abroad. Fourth, by allowing MNC's to enter the Indian market the government helped introduce competition for local companies. Infosys and others decided to cope with competition rather than ask for protection and began to find solutions. They came out with employee stock options plans, improved the workplace, increased salaries and added a host of benefits for their employees. As a result the company grew 20 fold in sales and 30 to 40 times in market capitalization. Going ahead, Infosys plans on listing its stock in US markets, setting up plants and offices in various global locations, to hire marketing personnel abroad for their services and raise their brand name and equity.

The growth of software companies has been phenomenal. What took Infosys seventeen years to do is taking others, who started after the economic reforms (1991) a lot less. Pentafour Exports & Software started in 1991 is worth Rs.2850 million (US $ 81 million) with a net profit of Rs.680 million (US $ 19 million). It was the first company to raise public funds for a software project by going public in 1992. The examples just multiply. So spectacular has been the growth of this industry that in terms of market capitalization a number of new start ups are "creating empires that are putting traditional businesses in the shade."

Table 7.3: Software Export Leaders (Then &Now) in Rs. million (US $ million)

Name	*Rs. in 1981*	*$ in 1981*	*Name*	*Rs. in 1997*	*$ in 1997*
Tata Burroughs	24	3	Tata Consultancy Services	6069	174
Tata Consultancy Services	20	2.5	Wipro	2588	74
Computronics India	–		NIIT	1613	46
Operations Research Bureau	–		Pentafour Software	1594	45
Systime Computer Systems	3	.38	Infosys Technologies	1267	36
Patni Computer System	2	.25	Tata Infotech	1060	30
IDM	2	.25	Satyam Computers	892	25
Datamatics Consultants	2	.25	International Computers	850	24
Hinditron Computer Systems	1	.13	Patni Computers	849	24

Source: Business India, March 9-22, 1998.

Foreign Direct Investment

The foreign investment regime in India has been liberalized since 1991, making it easier and more open to bring in foreign investment to start software ventures in India. Having recognized software as a high priority industry, the facility of automatic approval for foreign technology agreement as well as for foreign investment approvals was accorded to the software industry. Foreign investment up to 51% in new ventures can be approved by the Director of a STP.

- Need to attract investment: The government has initiated various schemes to attract foreign investment in this sector. Most recently concessions are being given to Non-Resident Indians (NRI's) and People of Indian Origin (PIO's) to invest in India. Since the economic reforms of 1991, Rs. 26911.91 million (US $ 897 million) of FDI has been approved for the computer software industry. This amount is only 1.68 percent of the total FDI for the country. The total number of approvals is 624 of which technical collaborations are 62 and financial 562 (SIA Newsletter, 1998).

- Reserve Bank of India (RBI): Automatic Approval by the RBI as per the existing policies of the Government of India, is granted for foreign equity up to 51% in software sector, provided the foreign equity covers the entire cost of imported capital goods. Automatic approval up to 100 percent equity from NRI's and overseas corporate bodies is granted, whose predominant owners are NRI's, provided the cost of imported capital goods is covered by the foreign equity. Automatic permission by RBI for foreign technology agreement is granted in the software and services sector, provided: Lumpsum payment of the price of the technology does not exceed Rs.10 million (US $ 300,000) and Royalty payments do not exceed 5 percent of domestic sales and 8 percent of exports. (The royalty rates are net of taxes). The payments are subject to an overall ceiling of 8 percent of total sales over a period of 10 years from the date of agreement or over 7 years period from the date of commercial production.
- Foreign Investment Promotion Board: (FIPB) has been set up to approve projects with foreign investment. The government promises to approve proposals within four to six weeks. Often for the software industry even this period is long and decisions need to be taken faster in cases especially as there are a number of approvals involved.

In cases of Joint Ventures or 100% foreign equity there is a longer approval process involved. The government has announced that these approvals will take four-six weeks. But, typically it takes more than that. From submission of the application package to the actual issuance of the approval letter can take between two to three months. This is so, because, despite the policy liberalization, the process is still quite long and convoluted.

The entrepreneur is asked to submit thirteen copies of the application. The papers is first submitted to the Director of STP, where it is studied and analyzed closely. Only when it is approved at this level does it go to the DOE. As the nodal ministry for the software industry, at DOE, a technical committee analyses the proposal on the basis of the recommendation of the STP Director. After which it goes to the Ministry of Industry where it is again analyzed, and if approved, recommended to FIPB. The process at the Ministry of Industry takes at least seven to ten days. Although there is supposed to be a FIPB meeting every Saturday, cases coming into Ministry of Industry are not always placed on the table the same week.

There is a need to modify the approval procedure of FIPB. It is cumbersome and the wait is long (sometimes more than two months) which is too long in a comparative sense for this industry. The list of secretaries who need to attend or delegate someone from their respective ministry is long (attached in Appendix A). Attendance by the Secretaries of Industry, Revenue, Finance, External Affairs, Commerce and Chairman Central Board of Excise and Customs is mandatory, other ministries can nominate an officer who is then designated to attend FIPB meetings. *There is a need to make these meeting more lean and specialized.*

FIPB meetings are held under the chairmanship of the Industry's Secretary every Saturday but information about whether a particular case was heard, recommended, or approved, is not communicated right away. On Monday mornings, STP officers are flooded with phone calls to check the status of FIPB applications. At times the officers have answers, but most of the time, they have not heard from the Ministry of Industry. *The Ministry needs to work out a way to communicate what happened at the FIPB meeting on Saturday.* People have complained about the non-communication from the Ministry of Industry as the applicants have been waiting for a long period, at times running into a few months.

Some recommendations for reducing FIPB clearance time:

1. There are three main agencies dealing with software applications, STP, DOE and Ministry of Industry. In each case there are two-three technical people who go through these application separately. What can be done: a group (or committee) from each of these three departments (STP, DOE and Ministry of Industry) can sit together and process the application in a joint manner, rather than each going through the application separately and discussing roughly the same issues as all these three departments examine the proposal from a technical point of view. They could even invite the entrepreneur to be available, and if they need any clarifications those could be addressed right away. Once recommended by

this committee the application can be put up to FIPB straight away.

2. FIPB can have sub-committees which can recommend proposals to it. If not in all sectors, high priority areas identified by the government, like software and infrastructure could form subcommittees for recommending cases to the FIPB. In the Software sector one person from STP can also be nominated to FIPB. Once a the sub-committee is formed with three people from STP, DOE and Ministry of Industry (recommended above), only one committee need review and examine proposals instead of three at present and directly recommend proposals, making the work of FIPB much easier. Specialized meetings of such sub-committees could be held before the FIPB meeting.
3. FIPB meetings can be staggered during the day so that all software proposals are heard at particular time enabling only those who need to attend to be there. Others officers may all be given slotted time in which the concerned cases from their ministries would be heard. Instead of calling all the secretaries, the six secretaries that have to attend along with the concerned secretary could discuss and clear the project from their ministry's point of view.
4. A similar procedure exists with the Inter-Ministry standing committee (IMS) which meets once a month to clear software projects for Indian companies. This meeting is chaired by Secretary, DOE and is attended by secretaries or representatives of Revenue, Commerce, Finance, Industry, Small Scale Industries and Planning Commission. After it is approved here it goes for the signature of the Minister of Industry. Most of recommendations sent by IMS are sent back for reconsideration. In most cases the reason given is to consult a more senior officer in one of the Ministries, either Revenue or Industry. In such cases the meaning of the Inter-Ministerial meeting is lost, i.e., if the cases recommended by it are sent back to be considered by officers higher in rank than those attending the meeting, may be these senior officers need to attend IMS meetings in the first place.

5. Government should be very clear about its policies since making frequent changes sends a confused signal to investors especially overseas investors. The government must spend time setting the guidelines in place, but once these are set, frequent changes should not be made.
6. A specified method of communicating decisions after FIPB meetings, between Ministry of Industry and Project Applicants needs to be set up. It may be a good idea to set up a telephone number and a designated person who could answer queries of applicants.

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ISSUES OF CONCERN

Manpower

1. The IT industry is based on recruiting qualified and well trained skilled manpower.
2. India's advantages in this regard, low costing, skilled, English speaking manpower may be threatened by the rising wages at home and abroad. Every time a new MNC comes into India, or specifically to Bangalore (India's Silicon Valley) an "earthquake takes place with the salary" structures of IT professionals.
3. It is becoming more and more difficult to find well trained and reliable professionals in this industry because the established software houses are involved in a fierce competition for recruiting talent largely from the same pool. The more trained and experienced talent find what is more "attractive dollar paid jobs" abroad and leave. Moreover, working at one of the established software companies is an easy conduit to jobs abroad, especially USA. On an average most young programmers after twelve to eighteen months of working in India leave.
4. The picture is not always as rosy as potrayed by Industry analysts. There is a high attrition rate of at least 15% to as high as 50% in certain firms and certain periods.

Recruitment

1. Coming of MNC's : Most of the top MNC's have started operations in India. Their entry has pushed salaries up but

on the positive side the competition from them made local companies, like Infosys and others come up with creative mechanisms, like stock options for their own employees, fitness centers and other benefits in order to recruit and retain better people.

2. It is possible to find fresh entrants into the job market. While there is availability of manpower between the 0-2 years, there is a wide gap in the availability of manpower with experience in the range of 2 to 5 year range, making it very difficult to recruit project leaders and managers at the middle-level.
3. Major pull for the software professional is the dollar salary they would get in the USA. A majority of them move to the USA after having worked for a short period at firms in India.

Contracts

1. The MNC's and increasing competition has forced companies to find innovative ways to offer attractive contracts to their employees with stock options, housing, health benefits etc.
2. Various benefits are now included to prospective workers with the hope of retaining them.

Retaining

1. *Stock Options:* Many companies give stock options because of which employees stay on longer than normal. In the 1998 budget government has announced that it will allow Indian companies to offer dollar stocks to their employees. This will put them at par with MNC's who were in a position to offer dollar stocks.
2. *Work Environment :* Increasingly, paying high salaries alone to retain people is not enough if the work environment is not intellectually stimulating people move on. World class work environments are in demand. The bar has been raised, basic hygiene factor is there, and companies have to be above that. A good combination of salaries and environment is most important. Challenging and Interesting work goes a long way in retaining people. Most companies have developed:

(a) Flat hierarchies: care is taken that a hierarchical structure is not the norm and programmers can interact with project leaders and project mangers easily and comfortably. Most CEO's of big companies are friendly and approachable, a big change from the family business culture of Indian companies. Most managers are on first name basis with their subordinates which again is a different work environment for India.

(b) Flexible schedules: Most software managers understand that software work is a mental activity which needs different work ethics. Engineers and programmers may typically work late into the night and then come in late the next morning. That is allowed and accepted in most places. In fact, companies offer transport or taxi service after office hours to facilitate the work schedules of employees.

3. *Mentoring:* many companies have programs for emotional bonding with employees. The softer skills, of leadership, employees feedback and service are becoming very important to manage teams. Managers have to be role models in order to get a person to stay on with the company.
4. *Other Incentives:* Most companies offer housing and health benefits. As stated above the bar has been raised in the market and companies are matching facilities and benefits given by others in the industry.
5. *Training & Education:*
    (a) Most companies run In-house training programmes for their recruits.
    (b) Many companies run open training programmes, from where they recruit at the end of each training session.
    (c) Some companies have tie-up with an educational Institute, Wipro, for example, has a tie-up with Birla Institute of Technology and Science (BITS) Pillani. When they hire fresh graduates they offer them an employee training program, a four year masters program, that an employee can get while working at Wipro. The four year taken is noteworthy as the rate of attrition is highest in the first two years. Their hope is that while doing the masters program the employee will

stay on and work at Wipro. If a company is able to retain an employee for the first four years the chances of him staying on longer increases tremendously.

Human Resource Development

1. India generates around 100,000 skilled man power every year. To supplement this, the Electronics and Computer software Export Promotion Council (ESC) has prepared a national strategy intended to double the availability to 200,000 per year. An inter-ministerial group constituted to look into the issue recommended doubling of the intake of students in the computer science courses. For these and other computer training projects in the pipe line, an outlay of around Rs.3.6 billion (US $103 million) was committed by the government.
2. With a serious shortage of software professionals in the Unites States, India which already sends a large number of trained personnel overseas can target this sector in a bigger way. A conservative estimate by the Information Technology Association of America (ITAA) stated that the U.S. faces a manpower shortage of 190,000 people; but independent surveys put this figure at much higher as 400,000. The growing number of unfilled IT jobs made the US lawmakers raise the quota for H1 visas from 60,000 to 95,000 in 1998. (India Abroad, 1998).
3. The American IT industry has at least three basic requirements: proficiency in emerging technologies, command over the English language, and flexibility to blend with the U.S. work environment. "More often than not, the candidate who has all these requirements is the Indian software professional," says Vijay Thadani, past president of the Manufacturers Association of Information Technology (MAIT). Estimating the requirements for off-site, onsite and the domestic sector, India would require to train and add a minimum of 120,000 software professionals, he added. Besides the IITs and regional engineering colleges, universities are offering masters courses in computer application (MCA). Numerous private learning centers have opened in all parts of the country. Some quality control and standardization of such courses needs to be made.

4. Various initiatives for technology and human resources development are in the pipeline and thus have been given due importance. Some examples:
    - STPI, plans to start 'School of Advanced Information Technology' at each of its centers which would run with the participation of industry. It also aims to set up Object Oriented Technology Centers (OTCs) and a program of quality rating for software exporters. STPI is strengthening its marketing efforts with the upgrading of the STPI web site to provide updated and segmented information about STP units or links to their other web sites.
    - The Task Force on IT and Software Development set up recently is aiming to set up an Indian Institute of Information Technology (IIIT) in every state as a center of excellence.
    - IBM and the Karnataka State Electronics Development Corporation (KEONICS) are planning to start an institute in Bangalore with the specific purpose of Internet training.
    - NASSCOM is also planning an institute of computer professionals.

Finance

Finance emerged as the main problem in a workshop conducted by STPI under a UNIDO scheme to find out what the needs of the small and medium sized firms were in the software industry. The financial requirement of this industry are different. The software industry does not require large capital goods against which it can take loans. Thus, the need to provide venture capital and sweat equity avenues of financing projects in this industry become crucial. These have not developed yet in India. Giving money on the basis of credibility, how to check credibility, how to conduct due diligence, these concepts need to be developed and worked out.

- *Raising Finance:* This is a major problem area for small to medium companies in the software sector as typically a small entrepreneur starts out with little capital and has even less collateral to offer. While the information age has grown and information technology companies have proliferated the mindset of lending agencies has remained the same so far.

- *Collateral:* The lending institutions including banks and other financial institutions look for collateral while processing loans to a business just as they would for a typical business idea. In the software area there is need to creatively think of how start-ups and entrepreneurs can raise money from traditional lending agencies.
- *Venture Capital:* The paucity of funds for start-ups and small businesses makes the venture capital route of financing a new business idea a viable option. This route becomes more attractive as banks and traditional sources of finance have been shy of investing in software. In the 1998 Global Competitiveness Report, India's position vis a vis venture capital was 50th out of 53 countries analyzed for overall competitiveness. This area is beginning to develop in India but needs government guidelines and regulations at this point so that the venture capital route of funding businesses becomes more acceptable and reliable.
- *Sweat Equity:* Mechanism to understand and accommodate sweat equity by entrepreneurs' needs to be worked out.
- *Banks:* Banks have been too conservative to invest in risky software businesses. There is a need for the mindset to change in this regard. This has been an area unknown to traditional lenders, as they tend to look for collateral that software entrepreneurs often do not have. Lenders do not have adequate procedures to assess risk and to be able to evaluate companies. They have been dealing with debt-funding for a long time. To be able to deal with risk funding is a gamble that will be difficult for public sector institutions to take. Some guidelines can be developed in this area as well.

Value Chain

Software companies in India are increasingly becoming aware that to be able to compete in the global market they have to move up the value chain. For some time now, Indian firms in the software business have been leveraging the country's cost advantage, but this advantage will not last endlessly. Moreover, writing low value code is being replaced by automated code generators in most of the host countries. Hence, each individual company must upgrade and move up the value chain. Many recognize this and are working toward this endeavor in their own unique way.

Although a company can enter a customer at any point along the value chain, usually most companies have followed a mix of the following steps. The typical value chain can be represented as follows going from low value to higher values. The value chain is depicted in a simple graph below.

- *Data-Entry and Data-Transcription:* A process by which Indian computer technicians sitting at various sites in India are able to provide a service like data entry or transcription for clients from around the world. Medical transcription is being done in a big way in India.

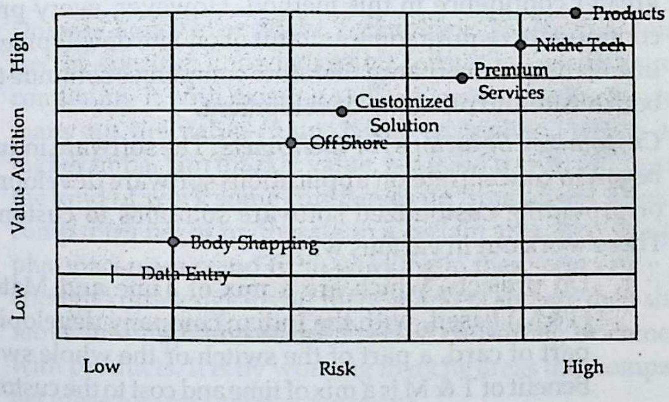
Value Chain in Indian Software Industry

Figure 7.8

- "Body Shopping," in which Indian programmers are sent abroad on a contact basis at a overseas site of a client. Here the equation is simply time translated to a dollar worth, i.e., 1 hour = x$. The customer saves on costs and the Indian company requires at this stage to perform with good recruitment, good people, good training, and good retention. However, tightening of immigration laws and restrictions on the number of H1 visas, given especially by the US where a majority of Indian firms do business, pushed for new methods to export software.

- *Off-shore Development:* There has been a shift from on-shore development to off-shore development. This has been possible because of maturity of the Indian industry, experience, but most of all because of the betterment of communication infrastructure via satellite links established by the Government. STPI has played a vital role in providing wide band high speed data communication facilities (HSDC) for software exporters. Earth Stations set up by VSNL also provided data communication facilities along-with Internet connectivity. The work earlier done at the client's site could now be carried on in India because of data link and the use of dedicated lines. Programmers sitting in India can directly log into servers in the US and work on these as if sitting on-site. Security and copyright issues were dealt with which brought greater confidence in this method. However, every project continues to require some amount of on-site development or installation maintenance therefore companies continue to do both onsite and off-shore development.
- *Customized Solutions for Customers:* The software industry began to concentrate on applications software development or providing customized software solutions to customers. These work out in various ways.
    1. Do projects, which are a mix of Time and Material (T&M) based, with the Indian company developing a part of card, a part of the switch or the whole switch. Benefit of T & M is a mix of time and cost to the customer.
    2. Develop methodologies: There is also a cycle time, i.e., how long it takes to do the project, if a Y2K project has been done in one month the first time around, the methodology for doing so is generally captured in a process and the next time around it is completed in half the cycle time. In this area the biggest opportunity for Indian companies is methodology of completing a project. A mix of process mapping states to gain the methodologies and bring them into their own is developed. By quality control and measures taken these

practices are institutionalized into action increasing profits substantially.

3. The life cycle of the service or product that the company is involved in, is it at the early stages, i.e., the design stage, or the development which is the middle stage or the testing which is the later stages. Typically, the highest paid services are at the early stages (which requires market knowledge) and later stages (which are related to technology knowledge). One matrix in going up the value chain is methodology, domain, and then niche technology.
4. Packages/services: Developing export markets for packaged software entails setting up of overseas marketing networks which is an expensive proposition. The government has begun to liberalize conditions for overseas investment but more needs to be done.

- ***Domain Specific or Niche Technology:*** To develop domain (sector-specific) knowledge and consult in specific areas by combining it with existing skills of system integration leads many up the value-chain. Niche technology, which has a higher impact on market value, is a good way to differentiate the kind of work some companies do from others. Typically companies begin to operate in a certain area, like, health or pharmaceuticals and from working in these areas they gain enough knowledge about those markets and are then able to move into high-end sector specific consulting or come out with products. It is by working in niche areas that companies get ideas for product development.
- ***Premium Services:*** The bigger companies, like Infosys, are in the process of marketing their services as "premium" which gets a better price for the assurance of quality, time taken, delivery and the name of the big company behind the service.
- ***Products:*** Most Indian companies' work on writing software code or work at the development stage of the product. However, intellectual property is built at the first two stages (i.e., design and specification) making it more difficult to develop product ideas if companies are not close to the customers and working closely with them on a day to day basis. In a number of cases

if they are not in US it is difficult for them to develop products and packages. Indian companies who want to build products should be based near the major markets, which happen to be in the western world, largely in the US. Some companies are now opening offices in the US with this specific aim in mind. For example, Wipro is investing close to Rs.250 million (US $ 6 million) a year on developing products.

There is also a high investment involved in product development. It could involve risk funding vis-a-vis debt funding. Product entrepreneurs must know how to deal with venture capitalists. Rather than going for risk funding which has its own ramifications most entrepreneurs not knowing the options go in for debt funding. Venture capital and risk-funding issues have only recently emerged in India and will take some time and guidance before they take root.

- *Develop Brand Name/ Brand Equity:* When Indian companies have a global presence in the sense that their names are recognized globally and they do not need marketing agents they would truly have arrived on the global scene. While this may be beginning to happen in a minuscule way, the need is for Indian companies to get a much larger share of the global software market.

Operational Issues

- *Connectivity*
    1. *Data Communication Links:* Software units need data-communication links on which their entire business depends. With the setting up of earth station by the DOE in various parts of the country dedicated links are available which software units can lease through STPI.

       The second option is to go with VSNL which is under the Ministry of Telecommunications and offers all kinds of services. Their connection from the gateway to international connectivity is very good, but the connection from the gateway to Indian customers is not very reliable. This is so because at present they are using the MTNL network which is not very good.

However, work is on to upgrade the network by using fiber optics. But, the work culture at MTNL and VSNL needs change. At present VSNL is the major provider of Internet access in the country which creates immense roadblocks in easy and quick access. This needs to change. VSNL's monopoly in providing services must end and this sector must be opened to the private sector Bajpai and Sachs (1998). The Task Force on IT and Software Development has made a similar recommendation.

Third option, VSNL also provides dial up connectivity for a few hours which is an option for the very small or start up units, as such connections can be billed on an hourly rate.

The fourth option is to get a simple ISDN line from the telephone department or MTNL. The most reliable of these three is the link through STP. The breakdown and disruptions in connectivity are issues that need to be addressed.

2. *Telephone:* India's telephone density is abysmally low, at about 1.3 per 100 in 1995 compared to 62.6 per 100 in the USA Bajpai and Sachs (1998). Besides the telephone density being low, new connections are difficult, require payment of fees, queues, waiting period and harassment from the telephone department. All these show ample room from improvement and need for a customer friendly approach.
3. *Internet:* At present VSNL provides Internet connection which is used by software export units for exporting software. This connection is very important for small and start up businesses. The nature of the software business is such that one begins very small, and success depends on the completion of the first project after which the business picks up. Even foreign ventures like to start small and test the Indian waters first before committing large scale capital. There are others who do not want leased lines as the tariff may be high, they would like to get dial-up connections. These are provided by VSNI

4. *Email:* Email access is provided by VSNL and other vendors, but at present they are using DOT's network. This needs to change. ISP's should be allowed to enter at reasonable fees. Combining email and Internet access should also be allowed.

- *Customs*

Government of India has been giving concessions on importing capital goods for STP units or export oriented units. These goods are allowed to be imported duty free as long as they are being used in the export of goods from India. However, as these are duty free goods the custom department steps in and does not allow these goods to move freely within India. They must be placed at a particular spot which is "bonded" by the customs department.

The logic is that as these goods have been allowed within the country free of duty for a particular purpose they must not be misused or sold in the domestic market. Hence, the need for custom bonding of the premises of these units which need also to meet certain export obligations and/or net export earnings.

No item can be taken out, or brought in, without the permission of the customs department. This causes operational delays and at times harassment of the entrepreneur. In some cases the entrepreneur is willing to import goods and pay the duty so that they don't have to face the custom bonding and have yet another set of papers to clear.

Some officers at the STP offices have attempted to simplify this procedure to the best they can locally within their jurisdiction. As STP offices provide HSDC for flawless connection with overseas customers to the units they have to provide these in custom bonded premises only.

Mr. Shyamlal Ghosh, ex-secretary of DOE was also of the opinion that this needs simplification or scrapping. Especially in those cases where other facilities are not being availed and only the HSDC is being provided, the custom bonding clause should not apply. Hence the demand that custom debonding should be provided. Those firms that avail of the customs benefits given to this sector can have some other forms to fill but no bonding of the goods should be done. Government should go for custom debonding. An issue that needs to be dealt with.

- ***Reimbursement of Taxes***

When a STP unit purchases goods in the local market the sales tax on those goods can be reimbursed to them. The procedure to get this reimbursement is also very cumbersome and many in the industry would rather have a more simple way to get this done.

- ***Power***

All software companies in Bangalore, for example, generate their own power thus not depending on state power. This adds to the cost of setting up and operating the business in India.

- ***Transport***

Most companies also provide transport for their employees and thus have to run their own transport companies of sorts.

- ***Marketing***

Marketing tie-ups is another major issue. Even before companies move up the value chain there is a lot that can be done. There is a need to broaden the base of the market in the sector that Indians are already in. For example, of the top 1000 companies, only about 200 know India, the rest do not know the Indian option. So the challenge is how to increase the "mindshare" how to know what problems the other 800 companies are facing and how to develop contacts and entry into them.

Further, most Indian companies approach the same 200 companies. Or get their contracts from third parties, through contractors in the US or elsewhere. Indian companies supply people to these contractors. Because Indian companies don't have brand equity, or the "mindshare" or the reach to go directly to the customers, these middlemen charge $100 per hour but typically give $30 per hour to Indian companies.

Individual companies alone cannot deal with these issues but there is a need to work together. An industry organization, like Nasscom or CII could take an 'India Brand' initiative for services in the US. This requires money and building the image of India and the Indian software industry abroad.

Delegations from individual companies do go abroad but these are on a one to one basis, what is needed is a promotion campaign from an analyst's point of view not an advertising point of view. For example, if a group like Gartner or IDC, (who influence the mind of consumers and have credibility of source), could bring out a one-page analysis on India and the Indian software industry it would have a huge impact. These tactics need to be pursued jointly by the industry, industry association, and/or government together.

Market Share

The global market share of India is 0.5%. Although in selective pockets the Indian presence may be high, these tend to be in low-end data transcription type of work. However, within that world the name of Indian software programmers and companies is very good, which is a good starting point. How to raise India's market share is a big challenge? The Report of the IT Task Force has stated that the Indian objective is to push software exports to US$ 50 billion by the year 2008. This is an ambitious goal. Big companies are beginning to address this issue by setting up offices abroad, hiring employees abroad and building management teams that will help get more business. But more publicity, for India and what Indian companies are doing, needs to be undertaken in a coordinated effort by government and industry organizations.

Recommendations

1. Major polices regarding the software sector are more or less in place. Where it is absolutely necessary for government to play a role in running software businesses, there is need for *enhancing the velocity of decision making in the government*. It is the procedural aspects of the policy that needed to be taken care of, and streamlined.

2. *Monopoly of VSNL should go.* Connectivity with Internet and email must be opened to private sector. The time taken for getting such connections should be possibly reduced to a few hours. Similarly *getting new telephone connections should be speeded up* and cost of international telephone calls should be made internationally competitive.
3. *Venture capital companies must be given incentives* (on the lines of US venture capital companies) to invest in the Indian software industry. Guidelines are needed in this area.
4. The boards of Indian *software companies must be allowed* to take decisions regarding the *restructuring of equity in their subsidiaries abroad* with easier approvals or without approvals from the RBI.
5. Indian software companies should be allowed to offer attractive and generous Employee Stock Options (ESOPs) that will allow them to attract and retain professional talent that is already scarce in the present market. *The boards of Indian software companies should also* be able to decide on the quantum, pricing, and lock-in period of the ESOPs for their global employees using options based on shares/receipts listed in India and abroad.
6. *The government can assist Indian software companies* to move from being India-centric to *becoming global companies*. This means enhancing brand equity in the global marketplace, making customers see them as global companies, attracting global talent and tapping the global financial markets for growth. For all this Indian companies must be allowed the following:
   (a) Indian software companies must be free to list on stock exchanges abroad;
   (b) to attract high quality talent on a global scale;
   (c) to create physical and technological infrastructure abroad; and
   (d) to acquire companies abroad.
7. *Ministry of Industry should have a separate cell for software*, which should exclusively deal with STP schemes.
8. This *cell could then also take part in the analyses of the proposals to be sent for FIPB* consideration.

9. Setting up of *a forum where CEOs and top management of companies can discuss matters relating to their mutual concerns.* Nasscom and STP do organize fora for such discussions, but a more informal forum is needed. These should be replicated at state and local levels as well. Common concerns like manpower, retention, and others mentioned above can get the attention of entrepreneurs.
10. *The Indian banks need to define norms for providing working capital and term loans to* Indian software companies.
11. The *Reserve Bank of India must remove the ban on capital investment abroad* for productive purposes by corporations as long as the company earns the foreign exchange for this purpose.
12. *The customs department must abolish the concept of bonded warehouse and replace it with a* penalty for not fulfilling export obligations.
13. Collaborative, distributed development is a key tool for the success in the export market in the coming years. Hence, *there should be no restrictions on movement of people and* technology across software development centers in India and abroad.
14. Government should be very clear about policies before announcing a policy as *making frequent changes sends a confused signal to investors especially overseas investors.* The government must spend time setting the guidelines in place but once these are set frequent changes should not be made. Only recently, the announcement of giving stock options to employees was made, then within a few weeks a tax on the difference of price for Indian employees was announced. There are numerous other examples. Such Policies do not build business confidence and costs the Indian economy heavily.

Recommendations for FIPB Approval

1. The three main agencies dealing with software applications, STP, DOE and Ministry of Industry can *form one technical committee and process the application in a joint manner.* Since all these three departments examine the proposal from a technical point, discussing roughly on the same issues, it makes more practical sense to examining the applications jointly.

2. FIPB can *have sub-committees, which can recommend proposals* to it. If not in all sectors, high priority areas identified by the government, like software and infrastructure could form sub-committees for recommending cases to the FIPB.
3. *Specialized meetings of such sub-committees could be held before the FIPB meeting.*
4. *FIPB meetings can be staggered so that all software proposals are heard at particular time* enabling only those who need to attend to be there. Others officers may all be given slotted time in which the concerned cases from their ministries would be heard. Instead of calling all the secretaries, the five secretaries that have to attend along with the concerned secretary could discuss and clear the project from their ministry's point of view.
5. With regard to the Inter-Ministry standing committee (IMS) which meets once a month to clear software projects for Indian companies, *senior officers need to attend IMS meetings.*
6. A specified and better method of communicating decisions after FIPB meetings, between Ministry of Industry and Project Applicants needs to be set up.

Recommendations of the Task Force on IT and Software Development

The recent report of the National Task Force on IT and Software Development has a long list of 108 recommendations, all of which are very laudable. This paper reiterates the need to implement those recommendations as soon as possible to achieve the goals and objectives set out by the Indian government. The main recommendations are listed here.

The National Task Force on IT and Software Development has recommended removing the monopoly of VSNL over Internet, 100 per cent depreciation on all IT products in two years, blanket approval for Indian IT companies to acquire foreign companies out of export earnings, issuance of 'sweat equity' to employees, and allowing cable operators to provide Internet through their network without additional license fee. The 'IT Action Plan' has suggested that government organizations and private Internet Service Providers (ISPs) should be allowed direct access to Internet.

However, private ISPs will have to obtain clearances for defense purposes from the concerned ministries. The task force has recommended that the authorized cable TV operators should be allowed to provide Internet access through their network. No additional license fee would be charged for this purpose.

According to an estimate, there are 20 million cable subscribers compared to 2 million PCs. Thus providing Internet through cable TV would help in the penetration of Internet. The report has also recommended that network such NICNET, STPs and private networks be allowed inter-connectivity without necessarily having to go through the DOT's I-Net network.

In order to improve national information infrastructure, the report has suggested that the Railways, defense, state electricity boards, Power Grid Corporation of India Ltd. (PGCIL), Gas Authority of India Ltd. (GAIL) and Steel Authority of India Ltd. (SAIL) should be allowed to lay fiber optic backbone for Internet purposes. These organizations have rights of way to lay cables.

To increase Internet and computer accessibility the government will allow existing public telephone booths and direct international dialing facilities STD/ISD and PCOs to upgrade and convert into Public TeleInfo Centers (PTIC). These units will be provided with ISDN or other digital facilities on priority without necessarily having to make additional investment on this account.

COMPARATIVE NOTE

Competition

India's software industry has competed mainly on the basis of low-cost skilled professionals. But Indians are well versed in high-end technologies and may need to tap the Non Resident population (NRI) connection. A number of NRI's working in this sector are already opening operations in India and thus taking high-end technologies and work there. This is a good trend and needs to develop more so that India can compete by moving up the value chain as discussed earlier. Relying on body-shoppers makes companies vulnerable to competition, as it is difficult to institutionalize the knowledge and experience of employees working abroad, that knowledge is wasted when programmers leave the company, as is often the case.

With an increasing shortage of IT professionals in the US, an increasing number of companies are looking to outsource some work to offshore development centers. India is doing well in this regard. But it faces competition from other countries and needs to monitor its own strengths and weaknesses from a comparative and competitive angle. Hence, we suggest that a software monitoring cell which monitors India's position and its place vis-a-vis other countries and in the global context is placed at the highest level. The data generated here should be available on a day to day basis to the highest officials and government personnel dealing with software policy.

According to NASSCOM from 1990-1997 in no other country except India has software exports consistently grown at over 50% annually. While these numbers are impressive withinIndia, however, in a comparative perspective, the Indian share is only 0.5% of the global market. India's main competitors in the segment that it does major work are Ireland, Israel, Philippines, Russia, ex-soviet countries and China.

Strategy

In the Indian case, there has been higher growth in the export market than for the domestic market in the software industry. Analysts have pointed out that there are strategic reasons for focusing initially on the domestic market to develop experience and capabilities before venturing into international markets. Producing for the domestic market allows companies to develop close ties with users who can provide valuable input into the product development process. However, in the Indian case the development of software exports has outstripped the growth of domestic software industry. This was largely because the computerization within the economy has been slow and policies for the internal market were still governed by the old mindset. Hence there is a need to spread the IT culture, increase internet access and make widespread use of PC's in the country which will help the growth of the domestic industry so it can catch up with the export side. A networked economy using computer technology in various sectors will bring end users and developers of software closer leading to the germination of new product ideas. This has been the more normal route for developing high-end technologies and the same can happen in India.

Table 7.4: Major indicators for India and its close competitors

Country	*Rate of IT Growth*	*Year*	*Value of Export in US $ (million)*	*Salary in US $*
China	43%	1997	3,400	4,627
Philippines	32%	1992	51	6,425
Indonesia	–	–	–	12,211
Singapore	34.3%	1995	6,700	24,830
Taiwan	48%	1987	11	25,670
South Korea	40%	1990	15	28,199
Israel	39%	1990	79	–
Ireland	38%	1997	5,000	25,000
India	55%	1997	1,800	3,765

8

INDIAN COOKING

Indian Cuisine

This is an introduction to Indian cooking and here we have the different eating habits of the people of India. Indian cuisine is considered to be spicy by many. Most of the Indian dishes contain a delicate blend of spices in it. After a hard day's work there is nothing more inviting other than enjoying a great tasting dinner with the rest of the family.

And, not to forget the many festivals around the year. Festivals always remind one of the specialty dish associated with that particular festival. And, there are hundreds of specialty dishes throughout the country!!

There are many kinds of vegetables and fruits growing in India. Sometimes, we can find vegetables known only to a particular region of the country. Hence, we can find real tasty dishes made from those vegetables in that specific region alone. Indian cuisine can be mainly classified into north and south Indian cuisine.

North Indian Cuisine

Wheat can be considered as staple in a north Indian meal. Usually a north Indian meal consists of Roti or Paratha (Indian bread) and a sabji (gravy made with vegetables).

But, on special occasions or when there is company a four course meal can be served.

First Course : Appetisers and drinks.

Second Course : Salads, Any Indian bread and sabji.

Third Course : Any spiced rice (pilaf or pulav).

Fourth Course : Dessert or sweets (or lassi).

South Indian Cuisine

Rice can be considered as staple in a south Indian meal. Usually a south Indian meal consists of rice and sambar (curry).

But, here again, on special occasions or when there is company a four course meal can be served.

First Course : Appetisers and drinks.

Second course : Any mixed rice and vegetables cooked with spices.

Third Course : Plain rice, sambar, rasam and yogurt with pickles (appalam also added for a crisper taste).

Fourth Course : Sweets and paan.

RECIPIES TAMILIAN CUISINE

Curries

Potato Curry

Boil the potatoes fully, peel and mash them. Heat some oil and add mustard seeds and urud dal. Add finely cut onions, fresh green peas and fry until the onions turn transparent. Add some fine pieces of green chillies and add the mashed potatoes and fry. Add some curry leaves.

Spicy Potato Roast

Very small potatoes-1 kg. Boil in a presuure cooker and peel. Heat oil in a fry pan, add mustard seeds. When it pops, add 1 tsp urud dal and add the peeled whole potatoes (Don't mash). Add salt, red chilli powder and fry for a little while (Do not cut the potatoes when frying).Add 1 small chopped tomato, a bunch of curry leaves, coriander leaves and fry evenly until it is fully roasted.In the end add a tsp of kari masala powder.

Plaintain Curry

Peel the plantains(unripe) and cut into thick slices. Heat 3 tsp of oil in a fry pan, add mustard seeds, when it pops, 1 tsp urud dal. Add the plantain pieces and 1/4 cup of water and allow it to boil. Add 1 tsp salt, 1 tsp red chillie powder, a pinch of tamarind and cook until the plantains are tender. Then roast (add oil if required) for about 5 min.

Pumpkin Curry

Cut pumpkin into fine pieces. Heat little oil, add mustard seeds, and when it pops, 1 tsp urud dal and 2 whole red peppers. Then add the chopped pumpkins. Add 1/2 tsp salt and fry until they are fully cooked. Add 1/2 cup grated coconut and fry for about 1-2 min.

Dry Foods

Curd Chillie Pickle

To 1 kg of green hot chillies(small) add 5 tsp salt and 2 cups of very sour curd or 2 cups of tamarind juice and leave it for 1 week with stirring well once a day. Then dry in hot sun or oven.

Manathakkali Vathal

Green manathakkali – 1 kg, salt – 4 tsp, sour curd – 1/2 cup. Add all and keep it for 5 days. Stir once daliy. The dry in hot sun for 2-3 days until it becomes completely dry and crisp. Store in tight container.

Bitter-Nut Vathal

Cut 1 kg of bittermelons into thin slices and dry it for one day. Next day soak the bitternut in 1/2 cup sour curd, and 4 tsp salt. Then dry it in the sun until it is fully dried and becomes crisp. Store in air-tight containers.

Vadams

Onion Vadam

Heat some water and when it boils add rice flour and heat for 2-3 minutes with constant stirring. Grind green hot chillies, lemon juice , asafoetida and salt. Add this to cooked rice flour and knead well. Add equal amoint of chopped onions and mix well. Make this into small uniform balls and place them on a large sheet of plastic paper. Dry this in the sun or place it in the oven so that they become crisp and then store in a tight container. Fry the vadam in oil for serving.

Sago Vadam

Soak 1/2 kg sago overnight. Grind 6 green hot chillies, 2-3 big limes, 1/2 tsp asafoetida and keep aside. Heat 11/2 litres water in a vessel and add the sago and stir well until the sago turns colourless. Add the chillie paste to this and stir well. Spread a large sheet of thick plastic paper in a place where the sun is very very hot. Fill up the sheet by placing a spoon each of this mixturein the form of a small plate. Leave enough gap between the vadams to allow for spreading. Dry in hot sun for about 4 days. When the sun sets the sheet has to be removed and placed again next day. Once the vadams are dried fully they will easily come out of the sheet if you remove them. Store these in a very tight container.

Rice Appalam (Wafer)

Grind 8 green chillies, 1/2 tsp salt and 1/4 tsp asafoetida.Add 2 cups of water to the ground paste and bring it to boil.Add 2 cups rice flour to this and cook for 1 minute. Stir well. Add 3 tsp ghee and knead the flour well so that the flour becomes very soft. Make even sized balls with this flour and roll it with a roller as in poori.Spread these on a sheet of paper and dry it in the sun or under the fan.

Thali Vadam

Par boied rice – 200g, salt – 1/2 tsp, sesame or cumin seeds – 1 tsp soak the par boiled rice for 3 - 4 hours and grind it to a thin smooth paste. Keep it overnight to get sour. Add salt and cumin seeds. Add water to make the batter into a thin consistency.

Ulundhu Vadam

Soak urud dal for 1 hour and grind it to a fine, thick paste. Add salt. Add chopped onions or chopped pumpkins.Spread a large sheet of plastic paper on a sunny place and place small balls of this mix until the flour is over. Dry for 2 - 3 days depending on the heat, until they become crisp. Store in air tight containers.

Rice-Onion Vadam

Heat 2 cups of water and when it boils add 1 cup rice flour and heat for 2-3 minutes with constant stirring. Grind 5-6 green hot chillies, 1 large onion(cut into pieces before grinding), 2 limes , 1/2 tsp asafoetida and 1 tsp salt.Add this to cooked rice flour and knead well. Spread a large plastic sheet and using different types of murukku achu, squeeze out the flour on the paper. See that the portions of the vadams does not touch each other. Dry this in the sun for 4-5 days. Fry the vadam in oil for serving.

Powders

Rasam Powder

Whole black peppers – 1 kg
Toor dal – 1/2 kg
Cumin seeds – 1/2 kg
Coriander seeds – 1/2 kg

Slightly heat without adding oil in a fry pan and grind the above ingredients into a nice powder.

Sambar Powder

Whole red peppers – 1/4 kg
Coriander seeds – 1/4 kg
Toor dal – 200 g
Gram dal –. 200 g
whole black peppers – 25 g

Asafoetida – a pinch Dry the above ingredients and grind into a nice powder.

Kari Masala Powder

Coriander seeds – 1 kg
Gram dal – 1 kg
Cumin seeds – 1/2 kg
Urud dal – 1/8 kg
Fenugreek seeds – 1/16 kg
Whole red peppers- 10 pcs

Asafoetida – 1/32 (add last)

Slightly heat in little oil until the ingredients turn golden red in a fry pan and grind the above ingredients.

Paruppu Podi

Gram dal – 1
Toor dal or Pottu kadalai – 1
Whole red peppers – 5

Roast the above without oil, add salt and asafoetida and grind into a very fine powder.

Ellu Podi (Sesame Powder)

Roast sesame seeds – 100g in a dry pan until it starts to burst. Slightly heat 5 red whole peppers, add salt and grind.

Curry Leaves Powder

Gram dal – 2 tsp, whole red peppers – 4, asafoetida-1/4 tsp. Roast the above in a little oil. Roast a cup a fresh curry leaves until it becomes crisp. Add tamarind-a pinch and salt to these and grind.

Coconut Podi (Thengai podi)

Grated coconut – 1 cup, urud dal – 3/4 cup, gram dal – 1 tsp, whole dried red chillies – 6-7, salt – 1/2 tsp, tamarind – a pinch, asafoetida – a pinch. In a little oil, roast all the ingredients except coconut until the aroma appears. Roast the coconut separately in little oil. Then grind them (without coconut) into a fine powder. Add the coconut and grind roughly once or twice. This can be stored and taken along with rice and sesame oil.

Dosai Milagai Powder

Whole red peppers – 15
Urud dal – 50 g
Gram dal – 50 g
Sesame seeds – 2 teaspoons
Asafoetida – a pinch
Tamarind – a pinch-10 sugar – 1/2 spoon salt

Slightly heat in little oil unxtil the ingredients turn golden red in a fry pan and grind the above ingredients.

Narthalai Podi

Take some bitter-orange leaves(narthalai) and pick the leaves separately. Remove the center line of each leaf and wash well. Grind whole red peppers, salt and asafoetida in a blender and add the leaves to this and grind finely. Store in a tight container so that the moisture in the powder does not go away.This will taste great with curd rice.

Pickles

Tamarind Pickle (Pulikkachal)

Coriander seeds (Dhaniya), fenugreek seeds, sesame seeds – each 1 spoon asafoetida – 1/4 spoon

Slightly roast the above without oil and grind into fine powder. Pour 3 spoons of oil in a fry pan and add some gram dal and whole red peppers and fry slightly. Add tamarind juice to this and bring it to boil.Add salt and heat with constant stirring until the mixture becomes thick. Now add the ground powder and stir constantly with heating until it becomes a non-sticky paste. Store in refrigerator.

Gooseberry Thokku

Boil 1/2 kg gooseberries in a pressure cooker and remove the seeds. Heat 5 tsp of oil in a frying pan, add mustard, fenugreek seeds and asfoetida. Add a cup of water and the boiled gooseberries(seeds removed). Add 3 tsp salt, 3 tsp red chillie powder and cook in low heat with constant stirring until it becomes a thick paste.

Gonkura Thokku

Wash the gonkura leaves and dry them on a sheet of paper. Cut into fine pieces. To 5 spoons of oil, add mustard seeds, fenugreek seeds, asafoetida, and add 1 cup of chopped leaves. Fry with constant stirring. Add 1 tsp salt, 2 tsp red chillie powder and cook until it becomes a non-sticky paste.

Rice

Tomato rice

Cut tomatoes and onions into small pieces. Pour 2 tsp of oil in a fry pan and add 3 cloves and cashews. When they get roasted and begin to smell, add cut onions and tomatoes. Add salt, red chilli powder, ground cinnamon and fry well.To this add cooked rice and mix well. Add a pinch of garam masala powder.

Lime Rice

Cook rice in a pressure cooker.Spread the cooked rice in a large bowl. Heat 3 tsp of oil in a small pan, add mustard seeds. When it pops, add 1/2 spoon gram dal, 1/2 spoon toordal, 1/2 tsp asafoetida and 2 whole red peppers and a pinch of turmeric powder. See to it that the dals are roasted until golden brown. Add this to rice. Squeeze out 2 small limes over the rice and mix well.

Snacks

Bajji

Take gram flour (Kadalai mavu) and rice flour in the ratio 2 1/2 : 1 and mix it with water to make into a loose paste. Add salt, red chilli powder, asafoetida, and saffron (kesari powder. Slice the vegetables (potato, onion, plaintain, brinjal). Dip it in the flour mixture and deep fry until it is fully cooked.

Pakoda

Take some gram flour and add grated onions, grated spinach, cashewnuts, green chillies, curry leaves and salt. Mix loosely. Heat oil in a frypan and drop the mixture in the form of even sized pieces.

Vegetable Cutlet

Vegetables-Potato,Beans, Carrots, Green peas, Beet Root (if preferred) Steam the vegetables in a pressure cooker or a food steamer and mash them into a tight paste. Add grated onions, salt, red chilli powder, garam masala powder and ground cinnamon (a pinch). Knead the mixture tightly. Take some rice flour and add water to make it into a slightly watery juice. Make the vegetable mixture into evenly sized balls and roll over the rice flour and then cover it with rawa. Deep fry the balls until they turn golden brown.
Side dish : Tomato ketchup

Vegetable Samosa

Steam the vegetables in a pressure cooker. Cut the onions into small slices.Take some oil in a fry pan. Add onions and cut green hot chillies and fry the onions until it turns transparent. Add the vegetables and fry them with stirring until they are completely cooked. Add mint leaves and coriander leaves(cilantro). Mix maida with water, knead it well.Roll into even sized balls and make into round shape using a roller.Cut into 2 semi-circles.Place the curry and fold on three sides to make into a cone shape.Deep fry until it becomes crisp. Side dish – tomato ketchup.

Pepper Vadai

Soak urud dal and whole black peppers for half hour,add salt and grind coarsely. Make round flat shape on a plastic sheet of paper and drop it into the boiling oil. Remove when fully cooked

Sundal

Soak 4 cups white peas overnight and then boil it in a pressure cooker.Drain the water and keep aside. Heat 2 tsp of oil and add mustard seeds.To this add 1 cup grated cocomut, 1 cup grated sour mangoes 3 tsp grated hot green chillies and cook lightly. To this add the boiled peas and mix well.

Masal Vadai

Soak 250 g of gram dal for an hour.Grind 3 green chillies, 3 whole red peppers and salt in a blender.Add the soaked dal to this mixture and grind coarsely.Add cut onions, ginger pieces and curry leaves to the ground mixture. Take a ball of this mixture and place it on a plastic sheet of paper and pat it to flatten it a little. Then drop them in boiling oil. Turn over both sides until fully cooked.

Kachori

For the stuffing: Soak 50g urud dal, 100 g moong dal for 2 hours and grind into a slightly coarse paste. Use this flour in idli plate and steam in a large vessel (as fo idli). Remove them fromn the plate and allow to cool in a large vessel or plate. Make a paste of green chillies and ginger and keep aside. In a pan heat 2 tsp of oil, add 1/2 tsp turmeric powder, 1/2 tsp red chillie powder, 1 tsp coriander seeds(powdered), 1/2 tsp salt, 1/2 tsp cumin seeds(powdered). Add 1 tsp of chillie-ginger paste. And fry. To this, add the prepared stuffing. Squeeze out 1/2 lime on it and add few coriander leaves and mix well.

For the kachori: maida – 2 cups, salt – 1/2 tsp, oil – 1 tsp. Mix the above by adding water little by little until the flour becomes tight. Keep this flour in a wet cloth and close for 10 min. Make small balls out of this flour and flatten them. Place the stuffing on this and close. Deep fry in oil. Side dish – mint chutney or sweet chutney.

Coconut Sundal

Soak any one of the following in water for at least 8 hours. Channa dal, white peas, black eyed beans, red kidney beans Add salt and cook fully in a pressure cooker so that the lentils become soft. In little oil, add mustard seeds. When it pops, add chopped green chillies and grated coconut and roast lightlt for 1 min. Add this to the cooked dal.

KERALITE CUISINE

To make methi, coriander or jeera powder, dry roast the spices (without oil) in a saucepan for a few minutes and then grind to a powder. To chop onions or other vegetables, the Sunbeam Oscar mini food processor does a great job! If using dried curry leaves, soak them in water for a few minutes before use.

Most of these curries freeze well. Freeze in small plastic containers with tight lids (1 to 2 servings) and heat in a Microwave covered for 4-5 minutes. Add some more spices and salt and garnish with fresh coriander leaves.

The following may be useful in translating some of the terms used in the recipes.

Indian/English	*Malayalam Name*
tuar dal	thuaran paruppu
urad dal	uzhunnu parippu
masoor dal	parippu
chana dal	kadala parippu
moong dal	parippu
hing(asafoetida)	kayam
tamarind	puli
coriander	malli
cayenne pepper	mulaku podi

methi(fenugreek)	uluva
cilantro leaves	malli ila
cumin (jeera)	jeerkam
mustard	kaduku
okra	vendakka
pumpkin	mathanga
cucumber	kumbalanga
saunf	perumjeerakam

Sambar

tuar dal or yellow split peas – half cup
onions – 2 - medium
okra – 10 or 12 (fresh or frozen) (optional)
tomatoes – 3 large (or one can) – quartered
tamarind extract (available in Indian stores) – 1 tablespoon
coriander powder – 2 tablespoon
chili powder – 1 tablespoon
turmeric powder – 1 teaspoon
methi powder – 1/2 teaspoon
hing powder – 1/2 teaspoon
mustard seeds – 1/4 teaspoon
methi seeds – 1/4 teaspoon
veg. oil – 1 tablespoon
salt to taste
coriander leaves, chopped – 4 Tablespoons
curry leaves – a few (optional)

Cook the dal with chopped onions,turmeric powder, chili powder and sufficient water. Cut the okra in two inch pieces and sauté them in a frying pan with one teaspoon oil till dry and slightly browned. Mash the cooked dal with a wooden spoon and add the salt, coriander powder, methi powder,hing and the tamarind extract. Simmer for a few minutes and add the tomatoes and okra and half of the coriander leaves. When the vegetables are cooked heat oil in a fry pan with a splatter screen or a lid and pop the mustard seeds. Remove pan from the fire, add the curry leaves and methi seeds.

Add this seasoning to the sambar and garnish with the rest of the coriander leaves.

Hint. Other vegetables that can be added to sambar are potatoes (which do not freeze well) ,shallots, pearl onions (available frozen), cucumber, Indian or oriental eggplant (baingan), beans, carrots, lima beans or squash.

Rasam

tuar dal – 1/4 cup
masoor dal – 1/4 cup
tomatoes – 1 16 oz.can or 4 large tomatoes
tamarind extract – 1/2 teaspoon
black pepper powder – 1/2 teaspoon
saunf – 1/2 teaspoon (optional)
whole red pepper (dry red chili) – 2 or 3
chili powder – 1/2 teaspoon
turmeric powder – 1/2 teaspoon
hing powder – 1/2 teaspoon
methi seeds – 1/2 teaspoon
garlic cloves – 3
cumin seeds – 1 teaspoon
mustard seeds – 1/2 teaspoon
coriander and curry leaves – a bunch
salt to taste

Cook the dal well with sufficient water. Add the tomatoes,salt, chili powder, turmeric powder and tamarind extract. Crush the cumin and garlic and add to the rasam with the black pepper. Simmer for a few minutes and add the hing powder. Heat a little oil in a fry pan and pop the mustard seeds. Add the methi seeds saunf and curry leaves after removing the heat source and add to the rasam. Garnish with coriander leaves.

Parippu

moong dal – 1 cup
turmeric powder – 1 teaspoon

cumin seeds, crushed – 1 teaspoon
garlic clove, crushed – 1 (optional)
desiccated coconut – 1/2 cup (optional)
curry leaves – a few
salt to taste

Dry roast the moong dal on medium heat for ten minutes. Cook it with sufficient water and turmeric. Grind the coconut with a little water and cumin seeds. Add to the boiling dal along with the curry leaves and salt.

Theeyal

Shallots or pearl onions – one cup
large onions – 2
garlic cloves – 2
grated coconut – 1 cup
coriander seeds – 1 teaspoon
methi seeds – 1 teaspoon
tamarind extract – 1 tablespoon
chili powder – 1 tablespoon
turmeric powder – 1 teaspoon
oil – 2 teaspoons
salt to taste
curry leaves – a few

Peel and chop the large onions fine. Heat one teaspoon of the oil in a frying pan and add 1/2 cup of the chopped onions. sauté well and when browned, add the curry leaves, coriander seeds and methi seeds. Stir for a few more minutes and remove and keep aside. Wipe the pan and add the coconut. On a low heat, dry roast the coconut till brown (not burned). When it is cool, blend the coconut with the onion mixture adding a half cup of water.

Heat the remaining oil in a saucepan and add the mustard seeds. When they pop, add the curry leaves and remaining onions and shallots and stir till browned. Add the tamarind extract and 1/2 cup water and salt. When it starts to simmer, add the blended paste and cook on a low fire for 20 - 30 minutes.

Pulinkari

pumpkin or squash or zucchini
(cut into one inch cubes) – 2 cups
coconut – 2 tablespoon
chili powder – 1 teaspoon
coriander seeds – 1 teaspoon
methi seeds – 1/4 teaspoon
turmeric powder – 1/2 teaspoon
tuar dal – 1 tablespoon
urad dal – 1 tablespoon
tamarind extract – 1 tablespoon
hing powder – 1 teaspoon
curry leaves – a few
dry red chilies – 2
salt to taste
oil – 1 teaspoon

In a frying pan, roast the coconut with the coriander, methi, urad dal and tuar dal until brown (use low heat). Grind the mixture into a paste when cool. Cook the pumpkin with the chili powder and turmeric powder and salt. Add the tamarind extract and simmer for a few minutes. Add the coconut paste, hing powder and the curry leaves.

Heat the oil in a frying pan and pop mustard seeds and dry red chilies and add to the mixture.

Olan

Brown peas or black eyed peas (canned is O.K.) – 1 cup
white pumpkin – cubed – 1 cup
yellow pumpkin – cubed – 1 cup
green chilies – 2 or 3, sliced
coconut milk – 1 can – 1 1/2 cups
curry leaves – a few
salt to taste

Cook the peas (if using dry variety). Add the pumpkins to the peas with some water and salt and simmer on a low fire. Add the green chilies. Finally add the coconut milk and curry leaves, heat for a minute and remove from fire.

Erissery

Green bananas or plantains (nenthrakkay) – cubed
turmeric powder – 1 teaspoon
chili powder – 1 teaspoon
cumin seeds – 1/2 teaspoon
mustard seeds – 1/4 teaspoon
urad dal – 1/4 teaspoon
coconut, grated – 1/2 cup (may substitute des. coconut)
coconut for garnish – 1 tablespoon
black pepper – 1/4 teaspoon
curry leaves – a few
salt to taste
oil – 1 teaspoon

Soak the cut plantains in warm water mixed with half teaspoon turmeric for ten minutes. Drain and cook the plantains with the remaining turmeric and salt. Grind the coconut well with cumin and add to the cooked plantains. Let it simmer. Meanwhile, heat the oil and pop the mustard seeds. Add the urad dal and the coconut reserved for garnish and stir till browned. Add this mixture to the erisherry and mix in the curry leaves.

Cabbage Thoran

chopped cabbage – 3 cups
turmeric powder – 1/2 teaspoon
cumin seeds – 1/2 teaspoon
green chilies – 2 or 3
des. or fresh coconut – 1/2 cup
garlic cloves – 3
onion – 1 small (optional)
urad dal – 1 teaspoon
mustard seeds – 1/2 teaspoon
oil – 1 teaspoon
salt to taste

Chop the onion. Heat the oil on medium heat and add the mustard seeds. When they pop, add the urad dal and curry leaves.

Then add the onions and sauté till browned. Now add the cabbage, turmeric powder and salt. Stir for a while, lower the heat and cook covered for five minutes. Crush the garlic and cumin seeds and add to the cabbage along with the green chilies and the coconut. Stir for a few more minutes and remove from heat.

Vegetable Fry (mizhukku puratti)

green beans – 1 inch lengths – 2 cups
plantains or green bananas – cubed – 1 cup
salt to taste
Lots and Lots of oil (just kidding – 3 teaspoons oil)

Soak the plantains in warm water and turmeric. Drain well and cook with salt. Cook the beans separately in a little water. (Zap it to save time – add a half cup of water and salt, cover and microwave it at high for 4 to 6 minutes). Heat the oil in a frying pan and add the beans (drain off any water left), Stir for a minute and then add the plantains. Stir till nice and browned.

Hint: This curry may be made with any cooked vegetable.

Mango Curry (fresh pickle) – Manga Kari

green mango – 1 medium
chili powder – 2 tablespoon
mustard seeds – 1/4 teaspoon
methi seeds – 1/2 teaspoon
turmeric powder – 1/4 teaspoon
hing powder – 1 teaspoon
curry leaves

Cut the mango into small pieces. In a pan, add the oil and pop the mustard seeds. Add the mangoes and sauté for a few minutes. Roast the methi seeds and grind to a powder (this acts as a preservative). Add this to the manga and also add the the rest of the stuff.

Hint: Mix the chopped mango with salt and store it in a glass jar for a couple of days before this curry is made.

Aviyal Recipe

Mixed vegetables available south Indian veggies like kumbalanga (similar to cucumber), kathirikka (baingan or eggplant), padavallanga (snake gourd) or padaval (chundakka) drumsticks (muringakka), raw plantain etc.

You can also use carrots (1 or 2 only, else it becomes too sweet), Japanese or any variety long eggplant, long beans or French beans, cucumber,raw banana, potatoes, zucchini other kinds of squash, and canned drumsticks.

If using plantain or raw banana, cut into long strips (2 inches x half inch x .25 inches approx.) and mix with some yogurt (2 tablespoons) and keep aside for 10 minutes.

Rinse well before boiling. If using canned drumsticks, add only at the very end. Also reduce the salt you add. The total sliced vegetables should total approximately five cups. When boiling add very little water if the veggies you add are rich in water (cucumber, cumbalanga etc.)

Add the sliced green chilies to the boiling vegetables if you don't like it too hot. Else blend it with the coconut.

Other ingredients:

1 or 2 green chilies one teaspoon cumin seeds 1/2 teaspoon turmeric powder raw coconut or coconut powder (1/2 cup) salt to taste (one teaspoon) 3 Tablespoons yogurt or 1 Tablespoon lemon juice or 1/3 cup diced raw mango fresh curry leaves or pre-soaked dry curry leaves Boil the veggies with water (say 1/2 cup), salt and turmeric powder. Add the veggies that take longer to cook like plantain first, then beans etc. Meanwhile, blend the coconut to a smooth or semi-smooth paste with the green chilies or half the green chilies, and cumin. When the veggies are almost cooked, add this blended paste and curry leaves cook for a few minutes. Finally add the yogurt/lime juice/raw mango and mix it in. You can season with mustard seeds if you wish but I prefer not to add any more oil (the coconut has enough of it). Serve the above with rice, pappadums and plantain chips.

Fish Curry (fresh water and small fish)

Fish – 1 lb.

Onion – 1/4 of a large one; slice it thin & long, & cut into halves.

Shallot – 1 big one, cut into small pieces.

Ginger – 0.5" piece, cut into thin slices.

Green chilli – 2, cut into half (long).

Tomato – 1, medium sized, slice it thin and long, and cut into halves.

Coconut milk – 1/3 of the can (4.5 oz).

Tomato puree – 3 spoon.

Mango powder – 1/2 spoon.

Uluva powder – 1 pinch.

Fish masala – 3 spoon.

Curry leaves – optional.

salt – as needed.

oil -- 2 spoon.

mustard seed – 1/4 spoon.

Heat the oil, fry mustard seeds, then add onion and stir for a while.Then add green chilli, ginger and shallot pieces (and curry leaves). Stir for a few minutes.

Add tomato, and then tomato puree; stir well, then add salt, uluva (methi/fenugreek) powder, mango powder and fish masala. (If you don't have Kerala fish masala, then add 1.5 spoon [fine] coriander powder, 1 spoon chilli powder, 1/5 turmeric powder, one pinch more uluva powder. Stir well, then add coconut milk.

When it boils, add the fish pieces; stir slowly, then cover it and cook on low-medium heat. Stir once a while (careful not to break the fish pieces) until it is cooked.

Note: To clean fish nicely, put the fish pieces in cold water, add 1/2 cup of salt, a cup of vinegar, and 1 lime/lemon juice, and keep it for 15 minutes. It will take away the smell and the bad taste of fish.

Fish Curry (salt water fish)

Fish – 1 lb.

Onion – 1/4, cut into small pieces.

Garlic – 5-6 cloves, finely chopped.

Ginger – 1", finely chopped.

Green chilli – 3, cut into half (long).

Shallot – 1 big, cut into small pieces.

Tomato – 1 big, cut into small pieces.

Tomato puree – 4 spoon.
Uluva powder – 1 pinch.
Tamarind – 1/3 spoon (use tamarind concentrate)
Salt – as needed.
Curry leaves – optional.
Oil – 3 spoon.
Mustard seed – 1/4 spoon.
Fish masala – 4 spoon.

Heat oil, fry mustard seeds, add onion, shallot, garlic, ginger, green chilli, and curry leaves, and stir for a few minutes. Then add tomato, and tomato puree, stir, and then add uluva powder, salt, and fish masala. (Use Kerala Fish masala; if you dot have it, add 2 spoon [fine] coriander powder, 1-1.5 spoon chilli powder, 1/4 turmeric powder, and 1 pinch more uluva powder.) Stir, and then add 1/2 cup of water and tamarind. When it boils, add the fish pieces, stir slowly, then cover it and cook on low-medium heat. Stir once a while until cooked (be careful not to break the fish pieces).

Note: To clean fish nicely, put the fish pieces in cold water, add 1/2 cup of salt, a cup of vinegar, and 1 lime/lemon juice, and keep it for 15 minutes. It will take away the smell and the bad taste of fish.

Palappam

2 cups of white rice
Half a coconut
1 table spoon of yeast
Sugar
Salt
2 table spoon of partially ground, cooked rice

Mix two cups of rice flour with 1 teaspoon of yeast and let it ferment for 4 hours. Add 3/4 cup of milk,1/4 cup of sugar, 1/2 teaspoon of salt. Stir the mix thoroughly. Warm up the vessel called 'Palappam Chatti' (available in most Indian Stores in the USA') Pour 5 tablespoons of this mix into the Chatti and rotate the Palappam Chatti by hand so that the mix spreads out evenly and in a circular fashion. Cover it with the lid and let it cook till the edges of the Appam turn slightly brown in color. Enjoy the Palappam with vegetable stew, beef or chicken,or mutton stew.

Vella Appam

2 cups of white rice
Half a coconut
1 table spoon of yeast
Sugar
Salt
2 table spoon of partially ground, cooked rice

Soak the washed rice for 3 to 4 hours.Wash and drain. Grind the soaked rice in a blender with just enough water so that the ground material will be thick. In the early stages of grinding take out about two table spoon of the partially ground rice and keep it apart for cooking and later mixing. (This will be called KURUKKU). Mix separately 1 teaspoonful of yeast, quarter cup of luke warm water and 1 tablespoon of sugar and allow the mixture to rise. Grind the coconut to a milky emulsion. Mix your ground rice, 'Kurukku'(cook the partially ground rice saved earlier like a thick porridge) the yeast mixture and ground coconut Allow the mixture to ferment for about 6 hours. Add sugar and salt as your taste dictates.You can add a little coconut milk to adjust the consistency.(You can add one beaten up egg at this stage if you fear appams sticking to the pan.– Alternately you can wrap a half fried egg in cloth and use it to rub the frying area of your pan.) Now put the mixture in a warm oven for 2 hours just before you make the Appams. After it rises DO NOT STIR. Use a cast iron pan and use the same technique that one uses for pancakes.

Mutton Stew

Goat Meat (Mutton) Or Lamb 2 Lbs
2 Red Onions
3 Green Chilies
4 Garlics
12 Cloves
Half Table Spoon Of Fennel(perumjeerakam)
10 Whole Black Pepper
4 Table Spoon of Vegetable Oil
Cinnamon Stick linch

Cardamom 4
Curry Leaves

Soak the meat in lemon juice for half an hour. Wash the meat HALF . Cook in a pot with just enough water, a table spoon of vinegar, quarter spoon of ground black pepper, and curry leaves. In another pot stir fry the onions, curry leaves and garlic and green chilies (seeds removed) in heated vegetable oil for 5 minutes until the ingredients look translucent. Crush the rest of the spices and add, continue to stir fry. Next add the half cooked meat(but not the gravy).Add 2 cubed potatoes. Add water, just enough to cook the potatoes Cook until the potatoes and the half cooked meat is done.Add the meat gravy. Adjust vinegar and salt to your taste.Add one full cup of thick coconut milk. Heat , do not boil.

Mango Churuttu

2 Mangoes
Cut into small square pieces
4 tsp chilli powder
3 tsp salt
1/2 teaspoon Asafoetida
1 teaspoon Turmeric pwd
1/2 teaspoon Mustard seeds
1 teaspoon Oil

Heat oil in a pan.To that add mustard seeds. When it pops reduce heat to low and add chilli pwd,salt,asafoetida,turmeric and stir for about 3 min.Turn off the heat.Let it coolfor a while.Add this mixture to the cut mangoes and mix thoroughly. Keep this for 7-8 days for the flavour to seep into mangoes. You can add a little bit of distilled vineager if you like.It will help to keep the freshness. This is the Kerala mango achar.

Mango Chutney

Maida (flour)
Sugar
4 tsp chilli powder
3 tsp salt
1/2 teaspoon Asafoetida

1 teaspoon Turmeric pwd
1/2 teaspoon Mustard seeds
1 teaspoon Oil

Mix plain flour (maida) with water (enough so that the mix is like dosa mix). You can add some sugar too it if you like. In another bowl, mix fresh grated coconut (you have to use the fresh one desicated/grated/shredded coconut is no good) with enough sugar (make it as sweet as you want.) Those who like the taste of salt or cardamom (or both) can add either or both to the coconut. Make round shaped dosas with the flour mix on a 'dosakallu' (or a saute' pan), turn it around, and take it on a plate when done. Put a couple of spoonful of coconut mix into it (put it on one side, in a line), then roll it (like a 'churuttu').

GOAN CUISINE

Prawn Balchao

Balchao may have originated from Burma or Malaca. In Macau, it is called "bilichao".

1 kg fine shrimp (known as "galmbo" in Konkani")
1 bottle palm "feni" (drinking it is a favourite goan pastime)
1 pod garlic
12 peppercorns
6 dry red chillies
3 tablespoons salt
2 clean dry empty bottles

Clean the shrimp thoroughly, wash and tie in a muslin cloth. Allow to hang for about 12 hours till all the water has drained out. Squeeze out any water that may be left. Grind the shrimps,salt, garlic and peppercorns with palm feni only. Mix dry chillies (whole). If any feni is left, it may be added to the shrimp paste. Fill in the bottle and cap tightly.

Apa de Camarao (Prawn Pie)

2 cups rice
1.5 cups grated coconut

1.5 cups toddy
350 g. sugar
6 eggs
1.25 cups prawn balchao
1 tablespoon butter
salt to taste

Wash and soak rice overnight. Next morning, grind rice and coconut separately with the toddy, to make a fine batter. Add the salt and sugar and keep aside for 3-4 hours till the batter is well risen. Now beat gently together the 6 egg yolks and only 3 egg whites. Add this to the rice-coconut mixture. Meanwhile line a cake tin 8" in diameter with greased butter paper.

Divide the mixture into 2 equal parts/portions. Put one portion evenly at the bottom of the cake tin. Now spread the prawn balchao over the bottom layer and then cover with the second portion of the rice-coconut mixture evenly. Bake in a preheated oven at 375 F till the Apa de Camarao is risen and golden brown on top. Cool and serve as a main dish, as a starter, sliced or with drinks sliced.

Caldeirda (Fish cooked in layers of vegetables)

10 large mackerels or sardines
4 large onions (sliced)
2 large tomatoes (sliced)
1 pod garlic (sliced fine)
1 inch piece ginger (sliced fine)
3 tablespoons salad oil
1 tablespoon vinegar
1/4 teaspoon turmeric powder
4 capsicums/green peppers (chopped) or green chillies
2 potatoes (sliced round)
salt to taste

Spread a few slices of onions and tomatoes in a pan. Halve mackerels and place half the quantity over the onion and tomato slices in the pan. Put another layer of onions and tomatoes and cover with the remaining mackerels. Lastly, sprinkle with ginger and garlic and the remaining onion and tomato slices. Keep the pan on the fine, pour the oil, six or seven tablespoons water and the vinegar over the fish. Add salt if desired. Close the lid of the pan and allow the fish to cook on a slow fire. Shake the pan once in a while. When the fish is half done, sprinkle the turmeric powder, add green peppers or green chillies. Serve with sliced potatoes.

Fofos (Fish Rolls)

1/2 Kg. of any fleshy fish
3 potatoes (boiled and minced)
1 level teaspoon turmeric powder
1 teaspoon chilli powder
1/2 teaspoon pepper powder
1 sour lime juice
2 tablespoons fish stock
1 egg (well beaten)
fine breadcrumbs
oil for frying

Clean wash and boil the fish in a little water and salt. Save the water. Remove bones if any and mash together with the minced potatoes, turmeric, chilli and pepper powders. Add lime juice and stock. Salt may be added if necessary. Form little oval rolls, dip into beaten edd, coat with bread crumbs and deep fry until golden brown. Serve hot.

Rissois de Camarao (Prawn Puffs)

For the filling:

1/4 kg. prawns
1 onion (chopped fine)
1 tomato (chopped fine)
2 or 3 tablespoons milk
A few drops of lemon juice

Wash and de-shell the prawns. Boil the prawns and then mince the boiled prawns. Using a little oil, fry the onions and tomato till brown. Then add prawns and fry for a while. Add the milk and lime juice. Cook till a thick paste is formed. Remove from fire and keep aside.

For the dough:

2 cups maida (flour)
1 cup water
1 tablespoon ghee (hydrogenated oil)
1 or 2 eggs
breadcrumbs

Allow the water to boil, add salt and ghee. Stir in the flour continuously. Remove from fire and knead when warm, roll out and cut into rounds (for example with a wineglass). Place a little prawn filling in each round. Press down the edges, dip in beaten egg, coat with bread crumbs and deep fry till golden brown.

Prawn Curry

Prawn and/or Fish curry with white rice are the staple diet of a large sector of Goan society and is usually eaten during lunch. The meal is often accompanied with fried fish or shrimp and green vegetables.

1 cup prawns, cleaned and deveined
4 green chillies/peppers, deseeded
1 medium onion sliced
1 cup coconut milk
0.5 cup water
1 table spoon coriander seeds
0.5 teaspoon cummin seeds
6 cloves garlic
10 dried red chillies/peppers
4 peppercorns
0.5" piece ginger
0.5 teaspoon tumeric powder
1 tablespoon tamarind pulp
2 cups water
salt to taste

Mix the prawns with the salt, green chillies and onion and marinate for 0.5 hours. Put all the spices in the mixer and grind with coconut milk and 0.5 cups water. Strain though a sieve and put in a deep pan on medium flame along with 2 cups water. Cook till the quanity is reduced by half, then add prawns with marinade and the tamarind pulp. Stir-cook for 10 minutes and serve hot with plain steamed/boiled rice.

Chicken Cafreal

Also known as Galinha cafreal, it is believed to have originated from Africa. It basically means "grilled chicken", although in Goa it is fried instead of being grilled.

1 chicken (750 g)
3 level teaspoons salt
1 sour line
35 small dry white chillies (?) and 2 green chillies
4 peppercorns
25 flakes garlic
4 inch piece ginger
sufficient oil to deep fry the chicken

Apply salt and sour lime juice to the chicken. The chicken may be cut into pieces if desired. Grind all the chillies, peppercorns, garlic, ginger to a fine paste and apply onto the chicken. Allow it to marinade for 7 to 8 hours. Deep fry and serve hot with a salad.

Sorpotel (considered to be a Goan classic)

Sarapatel is believed to have originated from the Portuguese Sarrabulho (which is some kind of pork stew with curdled pig blood !) and Cabidel (pork giblets). It is often consumed during (catholic) religious festivals or important hous ehold functions.

1 kg pork
1/2 kg pork liver and heart
1/4 bottle vinegar (approx. 300 ml)
a small amount of tamarind and salt to taste
Grind the following in vinegar:
30 dry red chillies
1 teaspoon cumminseeds
1 inch piece turmeric
4 cloves

Slice the following:
1 full pod garlic
2 inch piece of ginger
3 onions
4 green chillies

Wash and boil the pork,liver and heart in full piece. Cool and cut into small cubes, then fry in frying pan (without using any oil) till nice and brown. Using a little fat from the fried pork, fry the ginger, garlic and onions, until the onions change colour. Add the masala (the mixed spices), fry well then add the fried pieces of meat. The tamarind paste should be added to the meat together with a little vinegar (if necessary). Add two teaspoons of salt or more if desired. Cook on a slow fire till meat is tender. Finally add green chillies. Cook for another ten minutes and remove from the fire. Sarapatel tastes good on the next day, and even better after three days or more.

Empadinhas (Small pork pies)

1/2 kg. pork cut fine or minced
6 large onions

For the pastry:

250 g. flour seived thrice with 1/2 teaspoon baking powder
or
125 g. flour and 125 g. semolina seived with baking powder
3 egg yolks
1 tablespoon ghee (hydrogenated oil)
1/4 teaspoon salt

Knead all the above ingredients thoroughly till a soft dough is formed and keep aside. Do not use water.

Grind to a fine paste:

2 green chillies
1 red chilli
1/2 inch piece ginger
6 flakes of garlic
a pinch or two of cumminseeds

1/4 inch piece turmeric
6 peppercorns
1 inch piece cinnamon
6 cloves

Mix together the cut/minced pork and the ground spices well. Brown the sliced onions in a little oil, add the meat mixture and fry well. Add two tablespoons tamarind water or vinegar, a teaspoon of sugar and a little warm water just enough to allow the meat to cook. Remove from fire when the preparation gets relatively dry. Salt may be added if desired.

Divide the dough into small even-sized balls. Spread them on greased aluminum forms, fill with meat stuffing and cover with remaining dough. Close every empadinha well, till it has a nice finish. Brush the top of each empadinha with beaten edd yolk to give it a glazed finish. Bake till light brown.

Bebinca

200g maida (white flour)
10 egg yolks
500g sugar
1cup coconut juice (thick)
1/4 nutmeg (powdered)
200g ghee (hydrogenated oil)

Take the coconut milk, mix it with the maida, sugar and egg yolks. Stir thoroughly till sugar has dissolved, andd nutmeg powder and keep aside. Heat a little ghee in a pan and pour in one cup of batter. Bake till brown. Add another spoonful of ghee and another cup of batter. Bake and repeat this till all the batter is used up. Turn the bebinca upside down and cool before serving. Note: Baking of bebinca is done over a slow fire.

Kulkuls

This is a common sweet made during the Christmas season and is distributed to guests during their "obligatory" visits to friends and family. Production (and I do mean "production"), usually involved the whole family, and often, the extended family getting together to produce these sweets in assembly line style!

500 g. maida (flour)
1/2 cup coconut juice
1 tablespoon butter
2 eggs
3 or 4 cardamons (powdered)
Sugar to taste and oil for frying

Mix all the ingredients and cook over a slow fire till a soft dough is formed. Cool, knead and take small marble-like portions, roll over the back of a fork and deep fry till golden brown.

Neureos

1/2 kg flour
2 tablespoons ghee (hydrogenated oil)
a pinch of salt

For the filling:

1/2 kg. sugar
1/2 cup water
1 half ripe coconut grated fine
100 g. cashew nuts (chopped very fine)
100 g. raisins
2 tablespoons ghee
6 cardamons (powdered)
oil for frying

Mix flour, salt and ghee well, add just enough water to knead into a small dough. Keep aside. Heat sugar and water till a syrup is formed. Add the grated coconut, ghee and nuts. When the mixture has thickened, add raisins and cardamon powder. Remove from fire after the mixture turns quite dry. Cool and keep aside. Divide the dough into small balls, roll out into thin rounds, put a spoonful of the coconut filling on each round, wet the edges, press down to form half-moon shapes. Trim edges preferably with a cutter and deep fry in hot oil.

Puranpoli

This is a very popular dessert created during the Hindu festival of Holi. Holi is the last day of the Hindu calendar. On the eve of this festival a huge wood pyre is made and set afire. Discarded or unwanted materials like dead wood of trees, broken pieces of furniture etc. are also put in the fire. This symbolises the destruction of one's ill feelings and/or animosities towards others. The next day the Holi Festival is celebrated by playing with colours in the morning with friends and neighbours getting together. In the evening visits are made to friends and relatives when sweets are offered and good wishes extended to one another.

1/2 kg lentils (dhal)
1/2 kg. Cane sugar (jaggery)
1/2 k.g white flour (maida)
100 ml. oil
1 teaspoon cardamon powder
1 teaspoon hydrogenated oil (ghee)

Wash gram dal and boil this with half tea sp.salt and water till it is very soft. When it is slightly cold strain and add jaggery and grind to a fine paste, If it is sticky put it on a low fire and dry up completely. This is called puran. Knead maida with half teaspoon salt with water.It should be neither very hard or too soft.Add oil and knead it till oil is absorbed and now do equal balls of puran and kneaded maida. Roll maida ball into a small puri.Fill it with puran ball. Make it into a ball and roll to a poli. Put on the pan and fry it dry turning both sides. Eat this melted with pure ghee. It is delicious eaten hot and with a nice cup of tea.

ASSAMESE CUISINE

Kamrupi Biriyani

RICE 3 cups (for 6) long grain,
Green peas (for 6) 100-200 grams
Yellow Turmeric Powder 1/2 ts.
Green Cardamon 6-8
Whole cashews 20
Black Cardamon 4
Garlic 2 whole flower
Whole Cloves 10-15

Ginger 4" piece
Chicken 4 breasts
Green Coriander
One onion (big)
Eggplant 5 small broccoli
1 small head potato
4 parboiled onion
1 large, slices lengthwise oil vegetable cooking only

1. Cook the rice in two portions:
   (a) 3/4 as plain white rice;
      - add a little oil (1-2 ts.)
      - add the green (4) and black (2) cardamoms (smash green and black cardanoms)
      - add whole cashews (make two pieces each)
      - add water as appropriate, then flame on – take the cooked rice off to a plate
   (b) 1/4 as yellow rice;
      - add a little oil (1 ts.)
      - add 4 whole cloves
      - add water as appropriate
      - add the 1/4 ts. yellow turmeric
      - take the cooked rice off to a plate

After the rice is done, mix the two types (a) & (b) together and divide into two portions (1/4 and 3/4). Put aside.

2. Preparation of ingredients:
   (c) take the bunch of green coriander;
      - cut into half lengthwise -one half from root cut into one inch pieces (c)1
      - other half cut into one and a half pieces (c)2
      - do not mix (c)1 and (c)2
   (d) take the ginger; -use a mortar and pestal to mash (cut into tiny pieces is other option)

(e) take the garlic; -use a mortar and pestal to mash (cut into tiny pieces is other option)

(f) smash green (4) and black (2) cardamom together.

Do not mix (d) and (e), and do not mix (f) with (d) (e)

(g) cut the onion into long size

3. Preparation of Peas:

(h) fry 100-200 grams peas in little oil -no ingredients needed

4. Preparation of Vegetable:

(j) eggplant and small head broccoli; -cut lengthwise bite size (will be show how) -cut eggplant into bite size (will be show)

(k) choose medium size potato; -wash and cut into bite size (lengthwise), boil and peal the skin (or peal before boil).

Put oil in a frying pan (little more), warm up the oil, put onion, put five whole cloves, put half (c)1, put 1/4 of (d) 1/2 of (e) 1/2 of (f) fry for a while, (will be shown). Now put (j) stir and cover until done. Take (j) off from the frying pan and fry (k) in the same oil. If oil is not enough, put a little as needed. After (k) is fried and done add (j) and stir carefully. Cover for a minute or so in a low flame. Then the fry is ready to serve.

5. Preparation of Kamrupi Biriani:

(l) choose skin chicken;

- burn the skin (light) over flame (important)
- now cut the chicken into 2 inch pieces
- take half of (d) half of (e) and half of (f) to coat (or mix) the chicken
- put oil in a frying pan (large) and warm up
- put 1/4 onion and half of (c)1 on oil and fry until reddish-yellow
- put coated chicken
- put five whole cloves

Fry accordingly (need to cover to cook well) at relatively low flame (important) add salt accordingly before covering -chicken is about to done, just before 2-3 minutes or so, add 1/4 of (d), half of (c)2, and fried peas-low flame and put 3/4 rice on chicken and mix -cover for a while (this is Kamrupi biriani, ready to serve)

Thekera Dia Maasor Tenga (Sour Fish Curry with 'Thekeraa')

Ingredients:

1. Fish – 1 cleaned catfish, cut to about 3/4 inch pieces. (I use catfish. It is supposed to of the 'Maagur" family. Other fishes should be ok. Even very small fishes)
2. half teaspoon turmeric
3. Few green chilies – depending on the strength of the chili. cut to small pieces
4. "PansPhoran" – about one teaspoon of the mixture of fenugreek seeds, black "jeera", fennel seed.
5. Oil – Anything goes, but for authencity use mustard oil!
6. Salt
7. The most important thing – Thekera (I dont know what it is called in English. It seems to be a Assamese speciality. Even my Bengali friends dont know about it. Of course you can always use lime juice or tomoato to give the sourness. But I am picky about my "Thekeraa diaa Maasar Tenga").

Process:

1. Put the "thekera" in a cup of water. Generally one piece of "thekera" is good for one cup of water. So depending on how much gravy you want, use that many pieces. Keep for about 1/2 hour.
2. Mix the turmeric and salt with the fish. If you are using chili powder instead of green chili, you can mix it too.
3. Fry the fish in oil lightly. Remove from pan. If the fish breaks a little, dont worry, it will add to the gravy
4. In the same pan, heat some more oil and put the "PansPhoran" mixture. Put green chilies. When fried, put the cup of water with "thekera"
5. Add extra cups of water (depending on the number of "thekera" used)
6. When the mixture comes to boil, add fried fish and reduce flame

7. Let it simmer for some time(10-15 minutes). Let the juice of "thekera" get cooked.
8. Serve with white rice.

Xoriohor Maasor Jhol (Fish Curry with Mustard)

Ingredients:

1. Fish – 1 lb. cleaned catfish, cut to about 3/4 inch pieces. (You can use carp, trout etc. also)
2. Half tsp turmeric, two green chillies, cumin+corriandar powder 1tsp, one chopped onion, 1 tsp mustard seeds, corriandar leaves 1/2bnch, 2 tsp yougurt, 2 cloves garlic, pinch of ginger, 2 tbsp water, salt.
3. 1 tbsp cooking oil.

Preparation:

Mix the ingredients (2) together into a fine paste. Marinate the fish pieces in this paste for about 30 min. Heat 1 tbsp oil in a skillet or large pan. Fry the marinated fish pieces for about 5 min. Add the rest of the paste and cook for another 20 min. Serve over rice. You can add tomatoes to add volume.

Masor Jhol (Conventional Fish Curry)

Ingredients:

1. Fish – 1 lb. cleaned catfish, cut to about 3/4 inch pieces.
2. Half tsp turmeric, cumin+corriandar powder 1tsp, salt
3. Two green chillies, chopped, 1 chopped onion, minced garlic+ginger
4. 1/4 tsp cumin seeds, 1/2 tsp mustard seeds, chopped green corriander
5. two tomatoes, sliced.

Preparation:

Coat the fish pieces with the spices in (1). In a skillet or wide pan heat 1 tbsp oil and fry the fish pieces for about 2 min on each side. Remove and drain. In the remainimg oil, saute' cumin+mustard seeds, garlic+ginger and onion, added in that order. Now add sliced tomatoes. Cook for 5 min. Add the fish pieces and simmer for about 10 min. Goes well over rice.

Parar Jhol (Wood pigeons Curry)

2 wood pigeons
2 -3 tab spoons of black pepper (Ground)
2-3 dry red chillies ground (more if you want it hot)
2- 3 tea spoons of jeera (ground)
1/2 bay leaf 1 tea spoon of whole garam masala
1 onion grated
Salt to taste Quite a lot of oil preferably mustard oil

Method:

Cut the pigeons into small pieces. Rub salt, jeera and haldi and keep aside. Heat the oil Put the garam masala, tejpat and onions Fry them until it sticks to the pan Put jeera and jaluk Fry for 3 minutes Add pigeons and fry gently adding salt to taste Put water and let it boil until cooked. To garnish: Add a table spoon of hot ghee (optional).

BENGALI CUISINE

Chicken Curry

Chicken drumsticks or legs– 10
Cumin Powder – 3 teaspoons
Red Chilli powder – 1/2 teaspoon or to taste
Tumeric powder – 3/4 teaspoon
Cardamom – 3-4 whole pieces
Cinnamon – 2-3 small pieces
Onions – 2 cooking onions
Garlic – 3-4 cloves
Ginger – 50g whole ginger (a fingers length)
Tomato – 1
Salt – 1-2 teaspoons to taste

Preparing the Chicken

Remove the skin from the chicken then wash it thoroughly four to five times. Peel the skin off the onions and finely chop them. Shred the garlic into very fine pieces and mash or cut the ginger. Grind the whole cinnamon and cadamom (with shells) together to a coarse powder.

Cooking

Pour enough oil to just cover the base of a dry medium to large saucepan and heat until the oil is very hot but not smoking. Add the garlic and the onions to the oil . Fry until the onions brown. Remove the saucepan from the heat and leave to stand.

Place all the spices (tumeric, cumin powder and chilli powder) into a small cereal bowel. Add about half a cup of water and mix. Pour the spice mixture into the onions. Fry on a medium heat until most of the water evaporates but ensure that the spice mixture does not burn. Add the chicken and stir until all the chicken is coated.

Reduce to low heat. Add the salt, tomato and ginger and cook for 10 – 15 minutes. Then add enough water to just cover the chicken. Place a lid on the saucepan and bring to boil. Reduce to medium heat and simmer for 30 minutes or until the chicken is tender. Add the cadamom / cinnamon powder 10 minutes before the chicken is served.

Fast Track Curry

Start the recipe as above but add the chicken first into the onions, then the spices directly onto the chicken, followed by tomato, ginger and salt . Stir vigorously for 5 minutes on a high heat and add enough water to cover the chicken. The curry is ready in 30 minutes.

Tips

It is easier to remove the skin from chicken thighs than drumsticks. You could try using a clean tea towel or cloth to help hold the skin when pulling.

The most important step is frying the onions thoroughly as this determines the quality of the curry sauce.

Chana Daal

Daal is central part of almost any Bengali meal, whether it is served simply with rice and a chilli omlette, or as part of a true feast. All daals are based round boiled lentils, of which Chana is just one variety. Like our Pilau Rice it bears little resemblence to the dish you find in most Indian restaurants and a glance at the ingredients below should tell you that it tastes delicious. Of all the spices you need the one most typical to Bengal is the Kalwanji or onion seeds.

Ingredients

Chana Daal – 2 mugs
Tumeric – 1/2 teaspoon
Geera (Cumin) powder – 1+1/2 teaspoon
Salt – 1+1/2 teaspoon to taste
Sugar – 2 teaspoon to taste
Green Chilli – 2 – 3
Coconut (Optional) – 1
Indian Bayleaves – 3 or 4
Whole Geera (Cumin) – 1 teaspoon
Ginger – 1 inch peeled and chopped
Moori (aniseed seeds) – 1/2 teaspoon
Kalwanji (onion seeds) – 1 teaspoon
Dried red chilli – 1-2
Whole Cardamom – 8-10
Cinnamon sticks – 6-8

Preparation

Wash and drain the daal using hot water. Add plenty of cold water and leave to soak for one to two hours.

Cooking the Daal

Put the soaked daal in a large saucepan and half fill it with cold water. Bring to the boil and boil for 3/4 hour (if it starts drying out whilst boiling you can add more hot water). Add salt and mix.

Add the Tumeric and Cumin powder and a little sugar to taste. Take two or three small fresh green chillis and open them to expose the seeds by slicing them down their length; add these to the daal.

Fresh coconut flesh is sometimes now added – try it if you can get a whole nut. Halve the coconut and carefully remove the white pulp. Cut it into small squares and fry it separately until it is just going brown. It can now be added to the daal.

Frying the spices

In a second saucepan you now prepare the remaining spices for the shombar.

Heat a little oil to a high heat but not quite smoking. Add the red chillis and Indian bay leaves and lightly fry. Then add the whole geera, mouri, kalwanji and chopped ginger. The seeds should fry instantly. Remove the saucepan from the heat and immediately pour the liquid daal into the hot oil. Be careful as the combination is explosive! I usually do this over the sink. The better the "shombar" the better the taste of the daal.

Finishing off

Having had the fun off the shombar you are nearly there. Put the saucepan which now contains everything back on the stove and gently heat. You now add the whole Cardamom and Cinnamon sticks. These can be added whole to the daal, but if you are able to crush them into a powder first with a little mortar and pestle this gives even more flavour. You can also add a little butter at this point.

Boil the whole mixture together for a further 10 minutes and check if you need to add more salt or sugar.

You are now ready to serve the daal, though it will still taste wonderful if it is re-heated the next day.

Prawn with Onions

Fish is very important to Bengali cooking; not surprising with the Bay of Bengal on the East of the state. This is a beautifully simple dish which brings out the flavour of the prawns more than any other you will have tried before. It relies on having prawns bought whole, with the shells still on, rather than the pink, frozen variety which taste of very little.

The Kalwanji, or onion seeds, add a distinctive Bengali flavour; if you have problems finding these try our ingredients section, though if you really can't get hold of them this dish still tastes great without them. Prawns with onion can be served just with Basmati rice and daal, though, for a treat, you could try it with our Pilaurice and Chana Daal.

Ingredients

Whole prawns (on shell) – 1/2 lb
Large cooking onions– 2
kalwanji (onion seeds) – 1 pinch
Turmeric – 1/2 teaspoon
Salt – To Taste
Green Chilli – 1
Oil – 3 tablespoon

Preparation

Remove the shells from the prawns and discard. Coat them lightly with the tumeric and salt. Chop the onions. Open the chilli to expose the seeds by slicing it down its length.

Frying

Put the oil into a large frying pan and heat untill hot but not quite smoking. Add the kalwanji which should fry instantly. Take the pan off the heat and add the prawns. Fry the prawns until lightly browned. Next add the onions and the green chilli. Cook on low heat with the lid on pan until the onions become soft and brown; the art is to be patient and let it all cook very slowly. Serve.

Bengali Pilau Rice

Forget that multicoloured stuff served in your local Indian Takeaway – this is the real thing! Almost a meal in itself this really does have to be tasted to be believed. It is, of course, also a perfect accompliment to almost any other good Bengali food: try it with our Chicken curry or prawn and onions together with the wonderful chana daal. For this Pilau to taste its best do use a good rice; there is none better than Basmati from the Himilayan foothills. If you have any difficulty finding any ingredients look at our ingredients section.

Ingredients

Sultanas – 3 tablespoons
Rice (Basmati) – 2 mugs
Whole (unprepared) Peanuts – 25
Indian Bayleafs – 4-5
Ginger – 1+1/2 inch length

Whole Cardomon seeds – 20
Cinnamen sticks – 6 small
Sugar – 1 tablespoon – to taste
Salt – 1+1/2 teaspoon – to taste
Tumeric – 1/2 teaspoon
Butter (Danish) – 1/4 lb+

Preparation

Prepare the whole shelled peanuts by soaking them in hot water for 1/2 hour and then removing the skins.

The Cardomon seeds and Cinnamen sticks can be used whole in this recipe, but if you are able to powder them using a small mortar and pestle then you will get even more flavour.

Skin the ginger and chop it into small strips.

Wash the rice twice in cold water.

Cooking

Add plenty of water to the rice; at least twice the depth of the rice in a large saucepan. Sart cooking it over a medium heat and add a little Tumeric to the water. After about 20 minutes the outer part of the rice grains should be soft, but the inner core still hard; when the grains have reached this stage take the pan off the stove and drain off the water using a collinder.

Melt the butter in another saucepan. Add the peanuts and heat until they turn a little brown. Next add the Sultanas and heat until they puff up (about 1 minute), then the bayleaves. Next the ginger is added and fried until it browns; followed by the crushed or whole cinnamen and cardomin. Fry the mixture together whilst mixing it for about 1 minute.

Take the saucepan off the heat and now add the rice. Put a lid on the saucepan and shake the pan in circular tossing movement to mix it all together; as an alternative you can simply and gently stir it all together using a woodern spoon. Lastly add salt and sugar to taste and mix the dish with more tossing.

9

CULTURE AND HERITAGE

People

India is a land of great diversity, more heterogenous than any other country in the world.

Four major racial groups have met and merged in India resulting in a complex demographic profile. The pale-skinned Europoid entered from the western mountain passes, encountering settled populations of Dasyu, the dark skinned ones of Rig Vedic description.

The *Aryans* established a dominant presence in the northwest and the Gangetic plain, but the people of Mongoloid descent remained undisturbed in the Himalayan region and the highlands of the northeast. Their affinity with the southeast Asian world is remarkable and is reflected in the motifs used in the crafts. Though the Mongoloid people influenced the racial pattern of tribes in the eastern provinces of Orissa and Bihar, by and large, they stayed within central India. Southerners in peninsular India might have had a link with Negroid racial elements, as deduced from contemporary populations with dark skins and tightly curled hair. But the only true Negrito are isolated in the Andaman Islands.

The ethnic diversity is reflected in the variety of languages and dialects used in India – 17 major languages and 900 dialects or closely related subsidiary languages. The Indo-European group, particularly the sub-branch of the Indic languages, concentrated as dialects of northwest India and the Gangetic plains, share a linguistic pool with modern French, English, Greek and Persian, indicative of migrations of Europoid people. The Dravidian language family alone consists of 23 languages. Tamil is spoken in Tamilnadu, Telugu in Andhra Pradesh, Kannada in Karnataka and Malayalam in Kerala.

Tribal groups of Oraon, Munda and Santhal scattered through the highlands of eastern and central India use the languages of the Austro-Asiatic family, but many of the dialects with only oral traditions have lost.

Less than one per cent of modern India's population – comprising the Mizo, Naga, Lushai and Khasi, to name a few tribes – is inheritor to the languages of the Tibeto-Burman family. Secluded by geography and, later, protected by policy, their ethnological and linguistic identity has survived. Christian missionaries have contributed to the standardization of some of these languages.

FESTIVALS

India is a country of subcontinental dimensions. It is an ancient civilisation and an inheritor to a rich and diverse cultural tradition. The Fairs and Festivals celebrated across the length and breadth of the land present a fascinating pageant and showcase the resplendence of its arts and crafts tradition. Some festivals are of religious nature, others are linked with the lives of the people, change of seasons and harvesting. There are fairs which in past played an important role in the commercial life of the people and continue to be celebrated with great gusto.

Holi

One of the important festivals of North India, Holi – the festival of colours, is celebrated with gaiety and exuberance. It marks the end of winter and greets the advent of spring. According to legend, Holika was a demoness who was vanquished by Prahlad, her virtuous nephew. The heroic deed is commemorated with a bonfire on the eve of Holi and the next morning, the young and the old take part in boisterous singing, dancing and smearing each other with *Abir* – coloured powder, or *Gulal* spraying coloured water. This is a day to forgive and forget and to repair ruptured relationships.

Holi is associated with the romantic frolicking of the cowherd God Krishna. Many exquisite Mughal miniatures depict the celebration of Holi with Radha and Krishna in the leading roles. From folk music and dance of *Raas* to the austerely classical *Dhrupad* style of vocal music and the elegant *Kathak*, Holi continues to inspire artistes in different genres.

There is a lot of informal feasting, some people enjoy the heady effect of an almond flavoured milk drink *Thandai* spiked with Cannabis. The sweetmeat popularly exchanged on this occasion is *Gujiya* – a half moon pastry filled with condensed milk, dried fruits and nuts.

In Punjab *Hola-Mohalla* is celebrated the day after the Holi. On this day the blue and saffron dressed Nihangs regale the onlookers with a breathtaking display of fencing and archery, acrobatic riding and mock combat.

Diwali

Diwali, literally a garland of lamps, is an apt description of this festival of lights. Tradition maintains that lamps are lit to keep alive the memory of Prince Rama's return to Ayodhya after conquering the tyrant Ravana, the ruler of Lanka, who had abducted his consort Sita. The heroic deeds of Rama are recounted in the Hindu epic *Ramayana* and Diwali symbolizes the victory of virtue over vice. Rama, we are told had gladly accepted an exile in the forest to keep his step-mother happy and save his father from embarassment. He is considered the epitome of a dutiful son and a responsible ruler. Another myth traces the origins of the festival to the annual 'inspection tours' of Lakshmi, the Hindu goddess of wealth and prosperity. The faithful believe that on this day Lakshmi goes around visiting her devotees and sets up residence in the house she finds best spruced up and most hospitable. Diwali is an occasion for spring cleaning, painting the walls, decorating the floor with attractive designs wrought in coloured powder or paste made with rice.

The ritual traditionally associated with Diwali is gambling. Friends get together to indulge in games of chance, dice or cards. The 'addicts' seek legitimacy for their unusual pastime by referring to the celestial game of dice played by the great lord Shiva with his companion Parvati – a scene superbly sculpted at Kailash temple, Ellora. Others rationalise that this is just to remind oneself of the fickleness of lady luck and to inculcate a sense of balance in our pursuit of material success.

The children can be seen bursting fire crackers and lighting candles or earthen lamps. This is a time of generously exchanging sweets with neighbours and friends. Puffed rice and sugar candy are the favourite fares.

Dussehra

The festival of Dussehra is the principle celebration in many parts of the country. It is celebrated with great fanfare in Kullu in Himachal Pradesh, Varanasi in Uttar Pradesh, Mysore in Karnataka and slightly differently as Durga puja in West Bengal. It is the climax of nine day long festivities during the *Navaratri*.

The highlight of Dussehra in Kullu is a colourful procession in which idols of local deities are carried round the town to the accompaniment of joyous music. If here the flavour is distinctly rural and rustic, in Mysore this day is reserved for display of resplendent regalia. A caparisoned elephant is the mount of the Goddess Chamunda, the protector deity of Karnataka who rides atop a golden *howdah* – ornate mount with a seat. The palace in Mysore is so well lit up that it outshines the moon. In Varanasi the burning of huge images of ten-headed Ravana provide the finale of perhaps the most spectacular re-telling of the Rama legend.

Dussehra also commemorates the annihilation of the Buffalo demon Mahishasur by the warrior goddess Durga. In West Bengal, the run-up to the Dussehra is marked by community worship dedicated to the mother goddess – the supreme female principle. Beautifully decorated *pandals* – stalls – are set up to showcase scenes from mythology and even depict slices of life of contemporary celebrities! Different stalls, vie with one another in providing spellbinding tableaus and mouth watering delicacies. This is a time for leaving all the cares behind and to express the dormant creativity. The whole of province of Bengal is gripped with a cultural fever. Contests of song and dance provide lively entertainment in all localities.

Baisakhi and other Harvest Festivals

The first day of the Hindu new year is marked by Baisakhi, primarily a harvest festival. This is celebrated with great gusto in Punjab where Bhangara dancers, energetic and vigorous country youths enhant everybody with their ebullience.

When the sun moves into the northern constellation the Hindu almanac marks the passage with *Makar Sankranti*. In north India this is the day prescribed for ritual bathing which is considered particularly auspicious. In the south, the festival of *Pongal* coincides with *Makar Sankranti* and marks the reaping of the harvest and the withdrawal of the southwest monsoon.

On *Pongal*, rice is ritually cooked and allowed to boil over symbolizing the ushering in of plenty. The day after, the cattle are bathed, fed and decorated before being paraded down the village streets.

In Assam, conclusion of harvest time, brings with it the *Bihu*. Prayers are offered for a plentiful harvest and for the health of the livestock. *Bihu* dances are remarkable for their sensual lyricism while the drum beats seem to resonate the pulsation of a romantic heart.

The Goa carnival inspires the residents to an uninhibited spell of festive feasting, music and dance. The spirit of the season reflects the mood of *Mardi Gras* – the ritual parade led by Momo, the king of the Underworld.

Onam

Onam is the principle festival of Kerala and is linked with the legend of the mythological king Mahabali. Lord Vishnu manifested himself in the incarnation of a dwarf Vamana, and requested the powerful king for a grant of land streching three steps. When the grant was made Vishnu assumed the form of a titan and in three giant strides measured the three realms that Mahabali ruled. The generous king was ousted from his kingdom but was permitted to visit his country and subjects once a year. On *Onam* day the houses are cleaned, decorated and lit to welcome the benevolent ruler of yore. This is the time for the fantastic boat races at Alapuzha. Snake shaped boats rowed by almost a hundred strapping ores-men try to speed past one another egged on by cheering partisan spectators accompanied by a symphony of cymbals and drums. At Thrissur a colourful procession of caparisoned elephants is taken out.

Eid

The most important festivals for Muslims are the *Eids*. These are celebrated to commemorate the ritual sacrifice (Id-ul-Zuha – *Bakr-id*), conclusion of the month of fasting (Id-ul-Fitr – *Ramzan-id*) and the birth of the prophet (Id-e-Milad – *Milad-un-Nabi*). Eid is celebrated with a ritual *Namaz* – prayer – offering in a mosque, festive eating, exchange of gifts, donning of new clothes and dabbing of *attar* – rose essence.

The sweetmeat most commonly associated with the Eid is *Sevai* or Semolina bands. These strands, boiled in sweetened milk and garnished with nuts. They are served dry as well as with milk.

Urs is the name given to festivals annually held at the memorial shrines dedicated to *Sufi* saints. These are marked by devotional singing that is known to induce a mystic trance. The most famous *Urs* are held at the Dargah of Hazrat Nizamuddin Auliya at Delhi and Moinuddin Chishti at Ajmer.

Maha-Mastakabhishek

Once every twelve years the giant statue of the Tirthankar Gomateshwar at Shravanbelagola in Karnataka is ceremonially bathed with milk. This ritual homage is called *Maha-Mastikabhishek*, the grand anointing.

Guru Purnima

On the full moon day in the month of *Kartika* (November), the Sikhs celebrate the birth of Guru Nanak the founder of their faith. Lamps are lit and meals and *sherbats* are served to one and all.

Regional Festivals

In Maharashtra, *Ganesh Chaturthi* is the most popular festival. Ganesh, the elephant faced deity is the son of Shiva and Parvati and the lord of all auspicious beginnings. He is the remover of all obstacles and is to be propitiated before any other deity. Colossal images of Ganesh are built and carried all round the city before they are finally submerged in water. The city of Mumbai remains in a feverish pitch of excitement throughout this period. The Buddhists in Ladakh and in the north-east, celebrate the birth of the mystic master with supernatural powers, Guru Rimpoche Padmasambhava (*Lotus Born*) with frenzied mask dances – *Chaams,* and ritual display of painted scrolls (*Tangkhas)*. The monasteries of Hemis in Ladakh, Tawang in Arunachal Pradesh and Rumtek in Sikkim, are particularly renowned for these performances. These ritual dances illustrate the incorporation of pre Buddhist Shamanistic beliefs into the Buddhist faith.

Indian Classical Dances

Indian Classical Dance has many forms and also a strong regional flavour. In Indian mythology, *Shiva* the supreme deity is *Nataraja* the cosmic dancer. The universe comes into existence and disintegrates into nothingness, keeping time with his footfalls. This cycle is repeated infinitely. The dance has both elements – *tandava,* the virile masculine dimension, and *lasya,* the lyrical feminine grace. There are also other mythological accounts that narrate the origin of dance. One recounts how Sri Krishna assumed the form of an enchantress to beguile and destroy the demon Bhasmasur.

The revival of classical dance was painstakingly accomplished, assisted by scholars who researched the poses engraved in stone sculptures adorning temple walls.

The various dance forms of India include the popular Bharat Natyam of Tamil Nadu; the Kuchipudi style of dance, somewhat similar to the former, of Andhra Pradesh; the Kathakali, an elaborate dance drama where the dancers wear elaborate facial masks and make up and dance to the clash of cymbals and the beat of percussion instruments; the Kathak of Uttar Pradesh and Rajasthan which is a dance form heavily influenced by the Moghul court dances which is danced to the accompaniment of Persian musical instruments; the graceful Manipuri dance of Manipur, where the female dancers slowly sway to the beat of a single male drummer; the Odissi of Orissa, which is both graceful and intricate.

Of all these dance forms, Bharat Natyam is believed to be the oldest and the purest Indian classical dance. It gets its name from *Natya Shastra* and its author, the sage Bharata and is the oldest treatise on Indian dance , drama and music (2nd century AD).

The uniqueness of Indian classical dances is that they are all devotional in content. In fact Bharat Natyam was till the early 20th century, only performed by *'devadasis'* or maids of God, in temples.

Music

Indian classical music is divided broadly into *Hindustani* (North Indian) and *Carnatic* (South Indian). The styles are very different from each other, both in content and rendering. The ragas are similar, though they go by different names and treated differently in each style.

The Hindustani music offers a variety of forms like *khayal, dhrupad, thumri, tappa* and *ghazal*. Among these, the *khayal* is the most widely performed classical music form. A *thumri* is usually sung as an accompaniment to *kathak*. *Dhrupad* is the strictly classical form of music. The tappa is a lighter form of music which requires a good degree of proficiency.

North Indian music is recognised by the specific school it belongs to. This is denoted by the word *gharana,* which literally means 'family'. Some of the well known gharanas are Agra, Jaipur, Delhi and Gwalior.

Carnatic music is more rigid and structured. A concert follows a set style and order of rendering the compositions. They are free to explore the raga in which the composition is being rendered and improvise within that structure. *Varnam, kriti* and *tillana* are some forms of Carnatic music.

Since this form of music is deeply spiritual and has a devotional bias, the compositions reflect these aspect. Literary content is an important component of Carnatic music Musicians generally render the compositions of the musical trinity of Tyagaraja, Muthuswami Dikshitar and Shyama Shastri.

Indian Musical Instruments

There are many ancient and contemporary musical instruments in India. Among the well known instruments of North India are *sitar, sarod, sarangi, santoor, flute, shehnai* and *rudraveena*. Percussion istrumetns include the *tabla* and *pakhawaj*. Of these, the tabla is used most often in music concerts as an accompaniment.

South Indian musical instruments include the violin, veena, gottuvadyam, flute and nadaswaram. Violin is used as an accompaniment with vocal music but also as a solo intrument. There is more variety in percussion instruments of the south. *Mridanagam, ghatam, ganjira* and *thavil* are used as accompaniments. Of these, *thavil* is used only with *nadaswaram*, while *mridangam* is a must for any concert, be it vocal or instrumental, the other two viz., *ganjira* and *ghatam* are optional.

Cinema in India

On Dec. 28, 1895, Lumiere Brother Auguste and Louis, exhibited their cinematography in the first public show in Paris. Six months or so later, their assistant, Marius Sestier brought it to India. He presented the first show at Watson Hotel in Bombay on July 7, 1886. Today, India is among the top film producing countries in the world, producing films in many Indian languages.

The first story film, *Pundalik*, was shot in 1912. However, it didn't run successfully. The first film that was a commercial success was *Raja Harishchandra* by Dadasaheb Phalke in 1913, which ran nearly a month at a time when films hardly ran for a week. Initially movies were only made on methodological and religious subjects but slowly, other themes were also taken up.

Today, the Indian film industry turns out over 800 films a year in various languages, principal among them being, Hindi, Telugu and Tamil followed by Kannada and Bangali. The films include huge multi-star extravaganzas whose budgets run into several millions, art films that cater to the discerning film-goers, and commercial films that follows the set formula of the triumph of good over evil with songs and dances.

Though television and vedio have made their presence felt for many years now, films still hold the audience spellbound in hundreds of theaters across the length and breadth of the country. Perhaps nowhere else in the world have actors and actresses are treated as demi-gods and goddesses, commanding mass adulation bordering on hysteria. The film industry today is a multimillion dollar business providing both direct and indirect employment to thousand of workers.

10

RELIGION, SPORTS AND EDUCATION

Hindu Philosophy

The word Hindu originally meant people living on the banks of the river Sindhu. Now it has religious-cum-philosophical connotations. The roots of Hindu Philosophy are the ideas of the Vedas.The Vedas are called *Shruti* or 'that which is heard' and are regarded as revelations to sages passed down orally to disciples and students. Such ideas led to the Sankhya system of philosophy, which is *astik* (Theist), rational and systematic in its approach. The sage Kapila of 7th century BC is considered to be its founder.

Yoga is a system complementary to Sankhya, dealing with the practical attainment of liberation from worldly ties. Together the two systems are referred to as *Sankhya Yoga*. Vedanta refers to the 108 Upanishads which are philosophical musings of the Vedas about the Cause of Creation, Being, Cosmos and so on. Prominent exponents of Vedanta are Shankaracharya and Ramanuja. In contrast, Charvaka or Lokayata philosophy is a *Nastik* (Atheist), materialist system, which rejects Shrutis, deities, and even the idea of re-incarnation.

Vaisheshika philosophy has a scientific rather than a metaphysical approach and believes that the world is made up of innumerable but distinct (vishesha) particles. *Nyaya* is a complementary philosophy trying to arrive at 'nyaya' or knowledge, which is 'just', or 'right'. *Bhagavat-Gita*, a part of the epic Mahabharata, expounds the synthesis of three yogas or ways of attaining union with the Supreme Self, *Gyana-yoga* (union through knowledge), *Bhakti-yoga* (union through devotion) and *Karma-yoga* (union through action).

In relatively later times, Chaitanyadev, Rammohun Roy and Ramkrishna Paramahamsa have enriched Hindu philosophy in their own ways.

Islam

Islam had its genesis outside India, in what is now Saudi Arabia. Followers of this faith are called Muslims. Islam was basically propounded by prophet Mohammad (born around 570A.D. in Mecca), although the belief is that it was brought to the world by Adam and different messengers were sent by God to preach this lesson and Mohammad was the one who came last. In other words, Mohammad gave the final form to an already existing religion. Muslims are also referred to as Mohammedans.

The sacred book of the Muslims is the Quran (from Arabic 'to recite'), held to be revelations from Allah, and not the preachings of Prophet Mohammad. Engraved on a tablet in heaven, the Quran has existed from the beginning of time and was revealed to Mohammad himself through the angel Jibreel (Gabriel).

Islam is a monotheistic faith and the acceptance of Allah as the one God, and Mohammad as his prophet, is called Shahda. A Muslim is required to perform the devotional exercise of Namaaz five times a day. In the ninth month of the Muslim calendar, Ramzan, the Muslims have to observe Roza, a strict fast from dawn to dusk on each day of the month. They should visit Mecca, the birthplace of Mohammad, the prophet or Haji, at least once in a lifetime, and this pilgrimage is called Haj. They should donate a portion of their income to the poor, and this is the Zakat. Together, Shahda, Namaaz, Roza, Haji and Zakat constitute the five ingredients of Islam. Muslims worship at Masjids or mosques.

The law of Islam is the Shariah, believed to be based on divine revelations. The majority of the Muslim community are the Sunnis who consider that Mohammad as a prophet can have no successor. For the Shi'a Muslims, the main religious authority is the Imam or priest. Muslims entered India for the first time at the beginning of the 8th century when the Arabs made their inroads. Muslim invaders and settlers, other than the Arab conquerors of Sind, belonged to various Asiatic races, Iranian Persians, Turks, Afghans, other people of mixed descent, and even Mongols. Muslim immigration ended with the establishment of the Mughal dynasty in the 16th century. Increase in Muslim population since then has been by conversion and natural population growth. It was because of the weightage of the Muslim population in undivided India that in 1947, the Partition was effected and Pakistan was born a day before India regained her independence.

Christianity

Christianity is not native to the Indian soil, although there have been Christian communities in Kerala almost since the founding of the religion by Jesus Christ. Born in Bethlehem, to Mary and Joseph (who was a carpenter), Jesus spread love and mercy to all. In the environment of the Roman Empire, his message acquired a unique force of its own, the powers-that-be had him crucified after he had been betrayed to them by one of his own disciples. But he rose from his tomb and this Resurrection gave new strength to his other followers, who went on spreading his message.

The Christians believe in a trinity of God the Father, God the Son, and God the Holy Ghost. Their Holy Scripture, the Bible, is a collection of 73 books dating from about 9th century B.C. to the end of the 1st century A.D., divided into two sections: the Old Testament which corresponds to the Bible of Judaism and the New Testament which is entirely based on Christ's messsages.

Christians worship in what are called churches, praying both alone and in congregations. Although there are many sects and denominations of Christians, the two primary divisions are Roman Catholics and Protestants. The head of the Catholic Church is the Pope at Vatican. The Christian calendar calculates years from Christ's death. 10 years before Christ's death is 10 B.C. and 10 years after is 10A.D.

St Thomas the Apostle is said to have arrived in India in 54 A.D. Later, with the advent of the Portugese, the French and the British in India, there was further Christian influence. In India, Christians are basically converts, although there are descendants of European settlers and Anglo-Indians. In Goa, which had been long a Portugese domain, and the north-eastern states Mizoram and Nagaland, which had been under effective missionary influence, Christians form the majority of the population.

Sikh Philosphy

Sikh philosophy is a young, indigenous, monotheistic one. Guru Nanak (1469-1539) who was trying to unite Hinduism and Islam, founded the Sikh religious order. The word 'Sikh' derives from the Sanskrit word shishya or disciple. Sikh philosophy is a set of ideas developed by ten gurus or teachers and passed on to their shishyas or disciples. It conceives of God as nirakara or formless and also as one. It admits of no idols or superstitions, whether Hindu or Islamic. It recognizes all human beings to be equal. However it retains certain Hindu ideas, such as those of the immortality of the soul, of transmigration and karma. The sacred book of the Sikhs is the Adi Granth or Granth Sahib (completed in 1604), of which the Japji section was written by Guru Nanak himself.

The ten Sikh gurus are Nanak, Angad, Amar Das, Ram Das, Arjan, Har Gobind, Har Rai, Har Kishan, Teg Bahadur and Gobind Singh. The tenth and last guru, Gobind Singh, ended the guru system and organized the Sikhs into a military theocracy named Khalsa (Pure). He started the system of pahul or baptism into Sikhism with water stirred by a dagger, after which one would be entitled to use the honorific 'Singh' (lion) after his name and carry the five 'kakkas' or 'K's: kesh (hair tied in a topknot), kanga (comb), kara (steel bangle), 'kacha' (undergarment) and 'kirpan' (dagger). After Guru Gobind Singh's death, the Sikhs got divided into 12 groups. Collective decisions are taken by the leaders of the groups and taken as coming from God. Gurvani or 'the Guru's word' is the literary expression of Sikh philosophy.

Jain Philosophy

Jainism is an ancient, Indian-born philosophy, dating back to Vedic times. 24 preachers known as 'Jinas' (conquerors) or 'Tirthankaras' (fordmakers) propounded it across the river of life. Its first founder or 'Tirthankara' was one Rishabhadeva mentioned in the Yajur Veda. The 24th and last Tirthankara was Mahavira. It is a Nastik (Atheist) philosophy and does not accept the Vedas to be revelations from God. In fact, it does not believe in a God, though it does believe in re-birth. The ethical doctrines of Jainism are based on the path of liberation, comprising right belief, right knowledge and right conduct. The prescriptions or rules of Jainism are about the way to achieve this liberation. They apply both to ascetics and householders. The householders have twelve Vratas or codes of conduct, five Anuvratas (small vows) and seven Shilavratas (supplementary vows). If the Anuvaratas are strictly performed, they become Mahavratas (Great vows).

The Jains have two major sects, Digambara (Sky-clad or naked) and Shvetambara (White-clad). Digambara Jains are more austere and go about nude or free from all material trappings and social inhibitions. They allow for voluntary death in order to attain Kavalajnana or final liberation. In the later and less austere sect Shvetambara, people can use a simple white cloth. The difference in the two sects is more in rituals than in doctrines.

Jains believe in Anekantavada, or the theory that reality is many-sided. They subscribe to Syadavada, that is, prefix the word 'syad' to every proposition as a check against dogmatism. They do not believe a statement to be complete unless all its varying conditions have been fully stated, and this has led to an expanded form of Syadavada known as Saptabhanginaya.

Buddhist Philosophy

Buddhism originated from the teachings of Gautama Buddha, a prince from the Nepalese terai, who relinquished palace life for a life of meditation and spiritual upliftment, emphasized dhamma or right conduct, and organized monks and nuns into monasteries called samghas. The philosophy of Buddhism is to take the Middle Path, avoiding the extremes of getting addicted to worldly pleasures and subjecting oneself to unnecessary rigours. It rejects the idea of God, and stresses on moral progress independent of any God or Godlike figure. It questions the idea of a permanent or immortal soul, but accepts the idea of transmigration of souls.

A most important idea of Buddhism is that of the Four Noble Truths: Suffering exists; it is caused by desire; suffering can cease; and there does exist a path to nirvana or cessation of suffering. This Noble Eightfold Path consists of : Right resolve, Right speech, Right conduct, Right livelihood, Right effort, Right mindfulness, and Right concentration.

Later Buddhism split into two sects, Mahayana and Hinayana (Theravada). Mahayana laid stress on the concept of the Bodhisatta or 'one destined to be the Buddha' and also conceived of Eternal Buddhas who resemble gods or deities. Hinayana regarded the Buddha as a man and had a doctrine, Theravada, stressing the salvation of the individual. Later, the interaction of Mahayana philosophy and Hinduism gave rise to Tantric Buddhism or Vajrayana.

Zorastrianism

Zoroastrianism had its genesis in Iran. As they hail from a Pars in south-west Iran, the people who practise this religion are known as the Parsis. In 642, when the last Iranian empire was conquered by the Arabs, most Zoroastrians were forcibly converted to Islam. Others fled the country. Today, of the 1,30,000 Zoarstrians in the world, about 1,00,000 live in India. Although their number has never been very large, and is in fact dwindling, the Zoroastrians or Parsis have retained their identity very strictly.

Despite being a small community, they have contributed enormously to India. Dadabhai Naoroji, author of the path-breaking book Poverty and Un-British Rule In India, Jamshedji Tata, the father of Indian steel industry, JRD Tata, prominent industrialist of the Tata House and the father of Indian aviation, are a few examples. Zoroastrianism was founded by the prophet Spitama Zarathustra. It affirms that there is one god, Ahura Mazda (Wise Lord), other gods being manifestations of his qualities. He is the Creator or Ohrmazd. Here the equivalents of angels are the seven Amesha Spentas (beneficient Immortals). Associates of the Amesha Spentas are Yazatas presiding over sun, moon, earth, fire etc. Corresponding to the Indian concept of pitri or forefathers, there is the Avesta Fravashi (Faith and Inspiration). It is supposed that there are two spirits working in this world and one of them is Spenta Mainyu, the spirit of growth and prayers. The word for 'soul' in the Avesta is Urva (Chosen).

The holy text of the Zoroastrians is the Avesta, composed in a language belonging to the early Iranaian group of languages and resembling the language of the Vedas. The daily prayer-book the Parsis use everyday is Khordeh Avesta (the smaller Avesta). The Videvat are religious law books laying down codes of conduct and procedures for penance. The Yasna is the handbook of ceremonies, retreats etc, including the 17 cantos of the five Gathas – Abunavaiti, Ushtavaiti, Spenta Mainyu, Voha Khshathra and Vahishtoishti. Visparat is a supplement of the Yasna, glorifying Ahura Mazda. The Yashts is a reservoir of epic and historical happenings involving warriors and kings.

All followers of Zoroastrianism have to wear the Sadra and Kusti, a narrow band round the waist, similar to the upavita of the brahmanas. Aiwayaonhana (which also means stormy sky) is the term used to refer to it in the Avesta. The band is woven out of 72 strands of sheep wool (symbolic of the 72 chapters of the Yasna) and is wound thrice round the waist symbolising the three cardinal tenets of the faith: good thoughts, deeds and words.

Zoroastrianism flourished during the Acharminian dynasty of Cyrus, Darius, Xerexes and others.

ART

Literature

Traditionally, India has had an oral tradition. Vedic hymns, which are poetry of a very high order, used to be chanted and passed down from teacher to student, generation after generation, without their ever being written down. Epics like the Ramayana and the Mahabharata, even after they were recorded, continued to be sung and enacted out by bards and play-actors. Classical Sanskrit literature blossomed around 500 AD. Abhigyanashakuntalam, Meghadutam by Kalidasa, are the best examples.

Urdu literature and Urdu poetry flourished under the patronage of Muslim rulers. Mirza Ghalib's couplets, written around mid-19th century, are popular even today.

India is a vast storehouse of tales from the Puranas, the Jatakas and the Panchatantra, of folk tales, fairy tales and ghost stories too. But much of it, for long was not available in printed form.

Non-Literary work on a variety of themes like law, health, astronomy, grammar, administration also form a part of the Indian literary heritage.

The British introduced the printing press in Bengal in the early 19th century. With this, Bengali (and then other regional languages) literature began to emerge in a definitive form. Bankim Chandra Chattopadhyaya, Rabindranath Tagore (a Nobel laureate), Premchand, rank among the world's best literary figures. In every branch of literature, poetry, drama, novels, short stories, literary criticism, Indian literature has a tremendous variety to offer. Books, magazines, journals and newspapers are available in departmental stores, book-shops, kiosks as well as pavement stalls. The World Book Fair is held every alternate year. Indians write in English as well. Mulk Raj Anand, Khushwant Singh, Vikram Seth, Upamanyu Chatterji, Arundhati Roy, have made their mark in the English reading world.

Painting

There are two distinct strands of painting in India. One is rooted in religious traditions and nurtured by the patronage of the rich and royal, and done mostly by men. The other is rooted in everyday life and folk tradition, and done mostly by women.

To the former belong the Buddhist frescoes on the walls of the Ajanta caves in Maharashtra, the miniature paintings of the Mughal court, and the different school of Rajasthani painting. The style of Ajanta paintings is truly indigenous and was revived in the early 20th century by Nandalal Bose in Santiniketan, West Bengal. Although Persian-inspired, Mughal and Rajasthani miniatures too are part and parcel of Indian painting of the former genre. Of the latter genre, the most famous are the Madhubani and Mithila paintings of Bihar, the Worli paintings of Maharashtra, the

Mandana paintings of Rajasthan, which are basically wall and floor paintings.

Painting done not for art's sake but as a daily religious ritual include geometric and floral patterns on the floor by the womenfolk called *kolam* in the south of India, *rangoli* in Maharashtra, *alpona* in Bengal, *aripana* in Bihar and so on. Painting on cloth is exemplified by Kalamkari work of Kalahasti and Masulipatnamin Andhra Pradesh, and *phad* painting of Rajasthan. Quite unique is Tanjavur paintings embellished with gold leaf and semi-precious stones, which were originally commissioned by Maratha kings of the 18th century.

CRAFTS

Earthenware

Unassuming and fragile, earthen pottery nevertheless has a rich tradition in India. In most States, the potter fashions clay into pots, jars, tumblers and platters of myriad shapes, ornamental as well as useful. Except in the rains, the village potter's wheel is never idle. Like the weaver and the blacksmith, the potter too is part of the traditional village community.

Gujarat provides cooking and storage pots painted in red, black and white with geometric, floral and animal patterns, Uttar Pradesh tall jars with shiny black finish, Rajasthan highly polished black ware for preserving oil and ghee, the Kashmir Valley, Delhi and Jaipur pottery with blue glaze and flowery motifs.

Villages in the Eastern belt are mostly made of mud and especially in Bankura, Bardhaman and Birbhum districts, temples have walls of wonderful terracotta panels. Images of deities and earthen lamps are also fashioned out of clay, especially at the time of religious festivities. In Northern India, *diyas* (small earthenware lamps) and small clay icons of Ganesha and Lakshmi flood the market around Diwali, the Festival of Lights.

In Bengal, life-size images of Sarasvati, Lakshmi, Kali but especially of *Durga* (astride a lion accompanied by her four children, killing a demon) are made every year with the utmost of care and decorated with great splendour – only to be immersed in the water after the act of worship.

Metal Work

Ancient India used to have an international reputation for her brass and bell metal work. The technology of metalworking had been well developed by 2500 B.C. This manifested itself in exquisite yet sturdy images and icons in temples and household niches, lamps, platters and other items required for acts of worship, in gold, silver, copper, brass, bronze, and other mixed metals and alloys.

The world-famous dancing figure of Nataraja, a work in the Chola tradition, epitomises this achievement. Villages from Tamil Nadu mould and assemble brass oil-lamps (*dipa*), standing as well as hanging ones, adorned with decorative swans or women.

But what is even more remarkable is that many everyday household equipments in India are art objects. The kitchen ladle, the nut-cracker, the water-pot, are all imbued with the artistic spirit. The water-pot (*ghara, kalash, churru*) itself can take on myriad forms and shapes and have embossed borders.

Benares and Moradabad in Uttar Pradesh are famous for their hand-made or hand-finished brass, copper and even stainless-steel implements of traditional shapes. The blacksmith is traditionally a most important part of the village community. Tribal metalware, for example that of Bastar, Madhya Pradesh, is mainly of iron hammered and twisted into oil lamps.

Woodcraft

Woodcraft ranges from select temple craftsmen to makers of bullock-carts. In temples as well as richer households, there are carved wooden doors and door-posts. Wooden gateways are found in Orissa, Rajasthan, Gujarat and Maharashtra.

The speciality of Tamil Nadu was the *vahana* (temple chariot), a massive structure thick with delicate figurines.

Andhra Pradesh, Mysore and Karnataka are famous for their elephants and combs, carved mostly out of sandalwood.

Many *havelis* (mansions) of Rajasthan displayed screens, friezes, windows, and canopies of wooden fretwork. Domestic items like the karahi and the khanta too are crafted out of wood.

Textiles

India had possessed early the knowledge of cotton and fast dyestuff. Dyed and patterned cotton cloth from India has been exported from pre-Roman times.

Karnataka is famous for dyeing and weaving of silk, Rajasthan for the dyeing of cotton with indigo and alazarin. Gujarat and Rajasthan have especially developed *bandhni* work (tying-and-dying of pinprick patterns on woollen shawls and fine cotton cloth). Block-printing with the help of wooden blocks and vegetable dyes is another speciality of Sanganer, Bagru, Jodhpur, Kota and other centres in Rajasthan. Gujarat and Orissa are renowned for *ikat* work (a complex process where, before the cloth is woven, the warp or weft threads, or both, are bundled and bound with bands resisting dye-stuffs, and then repeatedly dyed to create bands of patterns).

In Gujarat there used to be a thriving centre of silk *patola* saris of double *ikat* work in Ahmedabad, Surat, Patan etc. Sambalpur and Cuttack in Orissa, Pochampalli, Chirala and Puttapaka in Andhra Pradesh are still flourishing centres of *ikat* textiles.

West Bengal has the tradition of exquisitely spun and woven *jamdani, baluchari, dhanekhali* and *shantipuri* saris.

From Kutch and Kathiawar in Gujarat come embroidery for doorway friezes, bags and garments. From Mathura and Vrindaban in Uttar Pradesh come metal-thread work.

North Eastern hill tribes turn out colourful shawls of patterns that are distintively their own. Kashmir provides the world with finely embroidered soft woolen shawls and carpets with wonderful designs, both using the paisley motif as a kind of trademark.

MISCELLENOUS

Vaastu Shastra

First and foremost Vaastu Sastra is not a religion but a science. The philosophy and concept of Vaastu Sastra has more to do with complex mathematical calculations along with the energy lines of the earth.

Faith is not a prerequisite to success. Instead effective creation of energy and positive vibration flows of balance and harmony are required.

The Principles

Vaastu Sastra is based on precepts laid down thousands of years ago in the Indian classics like the Puranas and Vedas. It concerns the order – the harmony of heaven and earth and ways in which we as humans can keep the balance of humans intact.

Few examples (just skimming over and touching the basic principles of Vaastu Shastra – only to make a person aware of what exactly it pertains to) are listed below.

While buying a site:

1. Select a site where the land is fertile and not dry and rocky.
2. Avoid water logged land or a site at the end of a road.
3. Avoid land too close to graveyards, cemeteries, crematoria or hospitals.

Building a house:

1 Regular shapes in houses with squares and rectangles are far superior to angular houses with protrusions or L-shaped and V-shaped structures.

2. Avoid U-shaped houses. People in these would face a great deal of hardship and unhappiness.
3. Avoid triangular shaped houses that have too many corners. The angles are not conducive in attracting positive energy.

Doors:

1. The main door of a house should never directly face a church, temple or cemetery.
2. The door formula states that the number of doors inside a house should be in even numbers and not in odd numbers. They should not end in zero. There should be an odd number of doors in line.
3. When doors face each other, make sure they face each other directly.

Staircases

1. A staircase should never begin in front of the main door nor end directly in front of a upstairs door.

2. Staircases should ideally be curved gently rather than straight.
3. Spiral staircases are not auspicious.

Industries:

1. The land for an industry as advised by our Ancient Masters should not be where the air is state, where plants cannot flourish, where soil is dry and lifeless, where surroundings are harsh and threatening and where shapes of hills are sharp and pointed.
2. The main shed or building to be constructed in the south west sector of the entire land leaving more space in the north and east direction and less space in the south west direction.
3. The overhead water tank should be located in the north east sector.
4. The raw material should be stored in the western area and the finished goods in the north west sector.

Just a few of the basic principles of Vaastu Shastra have be touched on. There is a lot more to be studied and understood in detail for the best results. This may be further discussed if required. Do remember that Vaastu Shastra is not magic. It does not have instant results. It is necessary to be patient and allow time for the positive energy and currents from the cosmos to enter the home or office and industry and await harmony and balance.

Vaastu should be looked upon as a science and ancient wisdom that has survived through centuries.

SIDDHA MEDICINE

Introduction

The Siddha System of medicine is the oldest and it is in vogue from the growing of vegetable kingdom on the Earth. There are two ancient system of medicine in India. The Siddha which flourished in the South India and Ayurvedha prevalent in the North India.

The word Siddha comes from the word Siddhi which means an object to be attained perfection or heavenly bliss.

Siddha generally refers to Athma Siddha that is the 8th supernatural power. Those who attained or achieved the above said powers are known as Siddhars.

There were 18 important siddhars in olden days and they developed this system of medicine. Hence, it is called Siddha Medicine.

Basic Principles

Siddha science considers nature and man as essentially one. Nature is man and man is nature. Man is said to be the microcosm and Universe is the macrocosm because what exists in the world exists in man. Man is nothing but a miniature world containing the five elements of the various principles which constitute the minerals, vegetables and the animal kingdom. According to Siddha medical science, the Universe originally consisted of atoms which contributed to the five basic elements, viz., earth, water, fire, air and ether which correspond to the five senses of the human body and they were the fundamentals of all the corporeal things in the world.

A close relationship is found to exist between the external world and the internal system of man. Siddhars (practitioners of Siddha) maintain that the structure of the human body is a miniature world in itself. Man consumes water and food, breathes the air and thus maintains the heat in the body. He is alive on account of the life force given by ether. The earth is the first element which gives fine shape to the body including bones, tissues,muscles, skin, hair etc. Water is the second element representing blood, secretions of the glands, vital fluid etc. Fire is the third element that gives motion, vigor and vitality to the body. It also helps digestion, circulation and simulation besides respiration and the nervous system. Above all, ether is the characteristic of man's mental and spiritual faculties.

Siddha system of medicine is based on Saiva Siddhantha. Siddha is a Tamil word that is derived from its root 'chit' which means perfection in life or "heavenly bliss".

The fundamental subjects of Siddha methodology are:

1. VADHAM (ALCHEMY)
2. AITHIYAM (MEDICINE)
3. YOGAM (YOGA)
4. GNANAM or THATHUVAM (PHILOSOPHY)

Siddhars, spiritual scientists of Tamil Nadu explored and explained the reality of Nature and its relationship to man by their yogic awareness and experimental findings. They postulated the concept of spiritualism for self improvement and the practices propounded by them came to be known as the "SIDDHA SYSTEM".

The eight mighty SIDDHIC PROCESS or OCTOMIRACLE ("ATTA-MA-SIDDHI") which could keep the body strong and perfect for EXTERNAL LIFE, where THERE IS NO DEATH OR REBIRTH.

ATT-MA-SIDDHI

ANIMA

The faculty of reducing gross body to the size of an atom and to enable him to fly in space.

MAHIMA

Power of expanding oneself without limit.

KARIMA

The power of reducing the primordial elements within himself to a point desired.

LAHIMA

The power of becoming as light as feather.

PRAPTHI

Faculty of knowing everything; Past, Present and Future and to secure everything as desired.

PRAHAMIYAM

The power of penetration like rays by which one can attain immortality.

ESATHWAM

Supreme power over animates and inanimates in the universe.

VASITHAM

The power of securing any object.

Yoga

Yoga' means not only contemplation but also communion and yoking all powers of the body, mind and soul to God. It is a very ancient and efficient system of disciplines and controls designed to produce the integration of the body, mind and spirit. It also achieves higher states of awareness and self-realization by methodical efforts to attain perfection. The therapeutic benefits obtained by performing the asanas are well known. The circulation of the blood is improved; tensions can be removed, and a feeling of well-being is induced. The muscles are strengthened, nerves soothed and physical endurance is increased. One important aspect is that blood vessels and nerves for the internal organs are "massaged" by the twists and bending, ensuring proper functioning. Aging bodies can have fewer aches and pains, stiffening of joints can be healed and depression alleviated.

Often mentioned are the following divisions of yoga:

HATHA YOGA

Concerned, primarily with the body and the asanas.

BHAKTI YOGA

Path of love and devotion.

MANTRA YOGA

Recitation and repetition of words and verses.

KARMA YOGA

Service through action and work.

JNANA YOGA

The intellectual path.

RAJA YOGA

Synthesis of Bhakti, Karma and Janan.

LAYA YOGA

The secret path, the 'Yoga of Dissolution'.

SPORTS

Cricket

Originally started in England, cricket has become one of the most watched games in the World.In India it has acquired the status of the Unofficial National game as it is played in every nook and cornor of this vast country.

THE FUNDAMENTALS OF CRICKET BATTING

The Fundamentals

Batting really consits of playing one ball at a time. The batsman must learn to gear himself for playing each ball with all the concentration at his command. Concentration can be improved if enough hard work is done to build up a habit of mind. Attitude is vital. If you build yourself up to the right frame of mind there is nothing you cannot do. charcter plays a large part in this . Cricket is a game to be enjoyed. Cricket is much more because it is a game that can help shape your life. What you learn on the field will hold good for many things in life too. A Straight bat and a stout heart are bound to take you far. Confidence will come from doing things the right way as matter of habit. To gain that habit, pay attention to the basics. Practising in front of a mirror at home will also be a sort of handy reference.

The grip Pick up the bat with two hands when the bat lies face down on the ground with the handle facing you. Your hands should be together in the middle of the handle when you wield the bat as if you would a club. Here are two basic rules for you to check whether you are holding the bat right: (1) Place the V (with thumb well stretched out) of your right hand on the splice connecting the handle the bat and pull you hand up close to your left hand on the handle. This two-step process will probably give you the most comfortable grip. The V's of the two hands should be on the same line. the back of the lefthand will face between mid off and extra cover. Remember that the left hand should always be firm. If you strengthen your left hand by constant excercise you will find that you are gripping the bat more firmly and that you have sufficient control of the bat in every straight-bat stroke. The golden rule of cricket is that the longer the full face of the bat is presented to the line of the ball the better the chances of meeting the ball. A strong left hand (for a right hander) is a very side on game.

The Stance

A balanced stance is essential. The feet should be equidistant of the batting crease. If you feel more comfortable placing them wider apart fo ahead though if you keep them too far apart it will affect your readiness of movement. The kness should be relaxed and slightly bent. The bat should rest lightly on the ground behind the little toe of the back foot. The top hand should rest gently on the front pad against the inside of the left thigh. Pick up the bat as the ball leaves the bowler's hand. The wieght should be equally placed on both feet at the crease. It is wiser not to move your feet until the possible lenght of the ball is judged. The body should face point with the left shoulder pointing at the stumps at the bowler's end. The head should be still with the eyes as level as possible. Be relaxed as the bolwer comes in. You will be relaxed if you are comfortable in your stance. Eyes should be level so that they focus on the ball at the same time. See any picture of Sunil Gavaskar at the crease and high. If it is not straight you are likely to drag your bat across the line of the ball. A straight backlift may not come naturally. The harder you practise earl in your career the better off you will be keeping the backlift straight. Remember the left hand should take complete charge of the backlift with the elbow bent. A firm grip with the left hand ensures that the bat comes down straight. Remember the backlift is as much as part of your stroke as the follow-though is.

Principles

There are two principles of batting which are equally important defence and attack. While defence is not an end in itself, mastery of defence will help you at the right time. The thrill of cricket lies in hitting the ball. To That extent, attack should be the ideal. To be able to attack over a period of time you must also be able to defend the good balls. But do aim to play positively. When everyone is doing that, the game become more enjoyable to all.

Footwork and Timming

Footwork is a vital part of batting. If batsmen have their feet glued to the ground they cannot play this game in the manner in which it is meant to be played. To play any bowling, spin or pace, footwork is essential. It is footwork that takes you and your bat to the right position play every ball. Sunil Gavaskar, Javed Miandad and Azharuddin are the best models for footwork. They move so easily from their stance on assessing where the ball is going to pitch that they are always that bit extra prepared to play. Gavaskar's back and across movement – the shuffle on the right foot – is to be recommended only when batsmen are facing bowlers of express speed. Otherwisee it would be wider to stay still while anticipating and reacting according to the length of the ball. Timming is everything in any ball game. At times firm push can fetch a boundary while a fullblocked shot may be msitimed to become a catch. Incorrect timing is the cause of many a false shot. footwork will help your sense of timing must be in you. This is what called ball sense.

Forward and Back Strokes

These strokes form the basis of all batting Remember that great batsmen are equally capable of palying forward as they are of playing backfoot will give you that extra time to watch the ball off the pitch while playing forward may give you the real edge in attack. But never believe that all forward play is attack and all the backfoot lay is defence. it is a possible to attack as well as defend off both front and back foot. Remember defence is a platform for a batsman must dominate the bolwing if he and his team are to profit from his presence at the crease.

Forward Defence

The forward defensive shots is the basis of all forward play. it is played to the straight ball not far enough up to the bat for drive. The objective is to drop the ball dead in front of the bat. the left shoulder should lead you out and on to the line of the ball. If you lead with the shoulder and head your body weight will follow automatically. Your eyes must always be on the ball. The left foot should take you as must bend just a bit so that there is no gap between bat and pad.

Forward Drive

Going forward to drive balls that pitch closer to you is natural extension of the forward defensive shot. Remember that the left shoulder is the key to all shots Remember that left shoulder is the key to all shots off the front foot, particularly the drives. the wider you intend driving to the offside the more should you shoulder go in the direction of the shot. The left hand must be in total command of all drives. if your left hand is slightly in advance of you right hand it will ensure that the ball stays on the ground as you drive. In defence there will be no follow through. When driving the bat should follow through freely. Are you: (1) Leading with your left shoulder? (2) Taking Your left foot as far forward as it will go comfortably? (3) Bending the left knee? (4) Letting the left hand take charge of the shot? (5) Moving the full face of the bat along the line of the ball? (6) meeting the ball in front of the left foot? Power comes from the acceleration in the swing of the backlift to follow through wrist work and transferring of weight. If you have the basics right there is no reason why you cannot drive the ball hard. Remember to always keep the ball along the ground. Back to defend in backfoot play a batsman must be prepared to use the distance between the popping crease and the stumps. the farther he moves back the more time he gets to play the ball. Remember that the right foot should not only move back but also across as far as possible to the line of the ball. Also that this stroke is as much a part of this side-on game and hence the left hand must be in control all the time.

Back to Drive

The principle of driving off the back foot are nearly the same as those of driving off the front foot. The left hand must be supreme and the left shoulder should lead in the direction of the shot. Note how Azharuddin plays these attacking drives off the backfoot and you will realise how profitable it can be to be a firm back foot player. These drives are probably the safest shots in the game. Also observe how Azhar make use of his hieght by rising on toes as he attacks the ball. All the ball short of a length are best played off the backfoot. It is as easy to drive a short ball on the stumps off the back foot as it is to learn forward into ball of fuller length to drive. The use of the wrists is also to be recommended for additional power as well as changing the direction of the shots at the moment of contact

Check List

1. Step far enouh back and move enough across to get to the line of the ball.
2. Keep the head and body balanced with the wieght more in front.
3. You must be side on when you play the shot.
4. Make the left hand do the guiding work for you.

On Drive

This shot is treated separately because beginners experience the most difficulty in playing this. The drives into the offside with the head and left shoulder leading the shot are easier to control and are more natural shots. The on drive presents a problem in that the front foot must be got out of the way if the shot is to materialise. Also the body weight should be transferred towards the on side with the right shoulder droping a bit to ensure that the left leg is moved out to face mid on or wider on the onside. Don't panic if youare unable to get this shot going early in your career. Some experience is called for before the shot can be played with control. When you do gain the mastery, play the shot as often as you can. There is no greater thrill than playing this shot correctly. Note all the movments when Dillip Vengsarkar, Sanjay Manjerkar and Sachin Tendulkar bring off the on drive. They are as near perfection as possible. Let us now take a look at other shots.

Leg Glance

Does the leg glance really belong in the section on drives? Probably not but the initial movment, forward or back, is the same as for the straight drive. The forward leg galance is played in front of the pad with the bat angled to steer the ball. Never choose the ball on the middle stump or further to the off when you wish to play this shot. The difference between the drive and the glance is that though the latter is played with a virtual straight bat, at the vital moment the bat is angled with the face of the bat being shut. The great Indian cricket pioneer and batting giant Ranjitsinghji is credited with the invention of this shot . So there is national tradition to follow but please do not play it except when you are hemmed in by much bowling that is directed at a fair length at your legs. The most suitable ball to be glanced off the front foot is the one on good length just outside the line of your front leg. the shorter ball may be glanced by going well on to the back foot. But if it is very short, you are obviously going to play strokes that are better designed to dealing with the short ball. There are many effective shots that are played profitably too, with the horizontal bat. These shots, in the playing of which the right hand dominates, may come more naturally to all players.

Sweep Shot

This shot is invariably played against the spinner This should be played only to balls pitching outside the line of the leg stump. The ball must be hit along the ground. If you roll your wrists properly at the time of execution of the shots you can keep the ball well down. Remember that the front pad should be between the pitch of the ball and the stumps. If you place your feet wrongly you might find yourself bowled round your legs.

Hitting to Leg

The full toss and the long hop, of which much will be seen in junior cricket, can be nit very profitably to leg provided that you follow these tips. It is said that much of junior crickt is won by teams which bowl the least down the legside and which hit most such balls bowled there by the rivals. Check List: (1) Get you head on to the line of the ball and keep looking at it. Don't take your eyes off it; (2) Make sure that your elbows are free from the body so that the arms can go all the way to hit the ball; (3) Hit the ball early and aim to play it square; (4) Don't try to hit too hard if you do you will find your body is off balance and your head would not be still.

Hook and Pull

The arguments over which is a hook shot and which is pull shot may be many. But that should not worry you so long as you are able to get the short ball racing through the onside. The shots are also very similar exccept that the hook is played inevitably off the short ball that rise shoulder high and the pull is played to balls not that short. The pull can be played effectively of the front foot too.

The Pull

The pull is hot hard into the ground. The shot is best played to the short ball that does not rise too high. The back and across movement will position you prefectly. When you size up such a juicy short ball coming up. Remember to roll you wrists before contact so that the ball is kept down.

The Hook

Hooking the short pitched ball is one of the glories of the game. A good hook shot player can make the most of fast, short pitched bowling. The back foot should not only go back but also far enough across to the offside so that the line of the foot is outside the line of flight of the ball. It is extremely important to keep you eyes on the short ball to be able to bring off this shot safely. The shot is dangerous to play on fast wickets as a miss would mean the ball making painful contact with your helmet or face. Do not attempt to play this shot unless you have been in for a reasonable period of time and feel well set to be able to meet the ball confidently Proper evasive action bouncer and proper backfoot defence to short ball will equip you better to deal with the threat of the coming at your body. By all means hook but only when you are well prepared to play the shot. Don't be fooled by the false confidence given by the helmet. You must keep your eye focused on the ball all the time. Your wrists must roll over. In short, you must be very good batsman to play this stroke well. Watch srikkanth play the hook and you will know how this shot must be played.

The Cut

A square cut is played to a ball which is short in length on the off side of the wicket. The back foot palys a vital role in the execution of the shot. To cut well, Judgement of length, timing and flexiblity of wrist are very important. Look at how well sanjay manjerkat beings of the shot. Sometimes with both his feet off the ground to pack greater power from the weight of his body. The most important thing to remember is that the bat must come down on the ball from above. The cut is a natural shot to play and a vauable aid scoring. practise it regularly at the nets and you find it gives you a good feelings as well as runs whn you bring off the shot in the match. The cut can be played both off the front and back foot. But it is a far safer shot when played off the back foot because you can see the short ball for a longer distance and hit is harder. A cut off the front foot. Check list (1) Get the bat up high so that it comes down on the ball; (2) Don't Jerk your head in any effort to get a lot of power into the shot; (3) Meet the ball at the right time. The best cut shot is the one that uses the pace of the ball to send it on its way to the boundary; (4) let your right hand control the execution of the shot. use all your wrist power to guide the ball into the ground.

The Late Cut

This shot is played to a ball outisde the off stump. playing late means excatly that. Instead of hitting the ball square as it passes the body, it is hit late. This shot can be very useful in limited overs cricket but is not be readily recommended at your grade of the game. Unless you are well in and wish to make use of gaps in the field, it is best not to attempt to play the late cut. Approach The thrill on the game lies in attacking the blowing Don't let the bowling Don't let the bowler get on top just because you are beaten once or twice outside the off stump. if the ball is there to be hit, it must be hit. the more you practise the better you will feel when playing shots in the match. Be modest when you score runs. May be that way you will score more.

Bowling Fundamentals

Bowlers win matches. That saying holds good even in the modern age in which the limited-overs game has taken such strong roots. Most boys tend to believe that bowling is hard labour, particularly when they have to bowl long hours at the nts, Since they do not gets to bowl long spells in matches, they may get to feeling that the many hours of practice are wasted. no wonder the tendency to concentrate more on batting from a young age seen. It must be made clear to any youngster that it is almost as much fun to bowl as it is to bat. Defeating a batsman by bowling a crafty ball to a planned field placing is a thrilling as getting runs. The battle aganist the batsmen can be temendous fun if a bowler works hard enough at his craft. Given some intelligence, much practice, more determination and a will to succeed, anybody can become a good enough bowler. Bowling is an art that demands utmost attention to detail. It can be mastered provided hours of sweat are put into practice. Don't forget that Kapil Dev is a glamorous a figure in Indian cricket as Sunil Gavaskar. he has done as much service to the country in taking wickets as Gavaskar has done in scoring runs. The prime requisite of a bowler, of any type, is that he must be able to command accuracy in line and length. Aby such command can be won only by sheer persistence and practice. The basis of a good bowling action is: (1) Correct grip; (2) Smooth, comfortable and physically economical run up; (3) Fluent follow through Remember that for all types of bowling tha ball must be held in the finger and not in the palm. The runup helps retain balance while building momentum to deliver the ball. the basics of the craft are: (1) Back foot must be parallel to the bowling crease before delivery; (2) Eyes must be fixed on the spot where the ball is intended to land; (3) The front arm must be straight – reaching for the sky; (4) Look at the batsman over your lead shoulder; (5) Prefect the unwinding of the body so that the wieght is transferred from the back smoothly; (6) The bowling arm must complete the semi-circle in one fluent movement; (7) The last stride of the runup is a jump off the left foot. The lead arm will strat swinging upeven as you jump. The turning movement is vital to the whole action; (8) The bowling action must follow a gradual acceleration to the wicket; (9) The lead shoulder must not be opened too early. Otherwise you will bowl open-chested; (10) Don't allow the front leg to crumple; (11) Follow through smoothly.

Fast Bowling

Right from boyhood one trend to take 10 to 12 steps before delivering the ball. This is a natural tendency. It is only later that bowlers learn that the ball can be sent spinning down the same length of the pitch. To be a fast bowler is probably the dream of every youth. Lads willing to bowl fasr must be encouraged in a country that is so short of pace bowlers. Don't be disheartened if you are not able to knock out ten batsmen the moment you start learning to bowl fast Pace bowling is very hard work and needs tremendous commitment. Pace bowling may be all about power, strength and aggression. But sheer brute force is not likely to achieve much without the backing of good runup, action and follow through. Rhythm is very vital to this craft. You gain it only by going through the routine day after day. The mere ability to move the ball in the air will not help if there is no accuracy in line and length, Swing will help even the fastest bowler vary his bowling from ball to ball. mixing of pace will bring in subtle variations. A disguised slower ball is as much of a suprise weapon as a super fast delivery.

Swing

Imran Khan float the interesting theory that it is wrist action which determines the swing of the ball and not the body action. Swing is the most important weapon in the fast bowlers' armoury. There are only a few bowlers of express speed who can also make the ball swing Imran is one of them. The slightly slower men move the ball a lot as Kapil Dev does.

Outswing

The ball running away to slips late in flight is the most dangerous that a batsman can come across early in his innings. To bowl the genuine outswinger, the seam must be pointed towards slip. The first two fingers must be alongside the seam with the thumb supporting the ball from underneath. One side of the ball alone should be polished and this side should be pointing towards the leg side if yopu are to bowl a good outswinger. The closer you get to the stumps while you bowl the prefect outswinger with the side-on action the more likely it is that the batsman will be forced to play at the ball. In general, Your target with the outswinge should be the middle and off stumps. But if a batsman is showing the tendency to play to leg you should aim at his leg and middle stumps so that he may be induced to hit across the line of the outswinger. Check list: (1) Are you bowling straight enough to make the batsman play the ball? (2) Are you bowling up to the bat to force the batsmen to play forward? (3) Don't waste the new ball by pitching beyond of stump Good batsmen will merely let it pass.

Inswing

The seam should point to fine leg. The polished side should be on the offside. The first two fingers are on either side of the seam. the inswinger is the best bowled from wide of the crease with the ball angling towards leg stump from off and middle. The higher the arm action is the later will be the swing. You must push the ball out with you fingers when you are releasing it. The idea would be to get the ball to duck in between bat and pad or to catch the inside edge and set up a catch for the close-leg fielders. An inswinging yorker, as bowled by waqar Younus, can be really deadly ball.

The Leg Cutter

The leg cutter is very much allied to the inswinger. By pulling the finger across the seam at the moment of the delivery some leg spin is imparted to the ball. Hence it runs away from the bat on pitching. Remember to pull releasing the ball. It is advisable to concentrate on swinging the ball one way to a set field rather than trying to mix both swings. Master one swing first. Once you have established mastery over one types of swing you can experiment with the other too but the line is very important if you are going to try this in a match.

Approach

Fast bowlers should use a lot of intelligence besides hard physical effort. Change of pace is invaluable. A bouncer followed by a yorker can be weapon. Sometimes, even a legbreak or offbreak bwled deliberately with the new ball may prove a surprise. If you are a fast bowler, learn to think like one. Concern yourself with bowling fast first and then seek to establish the controls like variations of length to test the batsmen. The medium pacer's accuracy is quite different from the pace like fire of the fast bowler. if you are fast, bowl fast. As a bowler, learn to stay on the offensive. To begin with, the intiative is with the bowler. Don't give it away easily.

Spin Bowling

For slow bowlers the power of spin is the basis of the basis of their craft. It may take many years to mature as a spinner but only work is likely to bring success. If a fingers and wrist must impart the spin. This will come only with practice. Off spin may prove easier to bowl because it is more closely allied to the first principle of running in serval places to deliver the ball which is what comes naturally to all. Leg spin is far more difficult to master, though because of its rarity you may find wickets easier to get.

Leg Spin

A proper pivot of the body is vey essential if leg spin is to be imparted. The ball is gripped in the first three fingers and spun off the knuckles of the index and third fingers. The third finger is the key to spin. The wrist should be bent forward until the moment of release. As the ball is released the thrid finger flicks outward towards the batsmen and the thumb downdards away from him. The wrist flips forward. Put yourself through the motion while in front of a mirror and you will get an idea of what is being said here Top spin is imparted by the forward flip of the wrist beginning a little earlier so that the spin imparted in directly down the line of flight and not towards the slips. The googly is bowled by the wrist turning over even earlier. the back of the wrist faces the batsmen as the ball comes out. This is called back of the hand spin. This may not comes easily. There is absolutely no substitute for practice. The coaches would do well to advise their budding leg spinners to first learn to spin the ball and then try to attain some control over length.

Off Spin

The first two fingers assume greater importance off spin whereas it is the leg spinner's thrid finger which does most of the worrk. The stock ball may be off spin but the off spinner must have the arm ball, the floater and the drifter and even the slow medium away swinger if he is to dedicate terms to the batsman. The higher the action the more the bite and higher the bounce off the wicket. Class batsmen concede that it is bounce from a spinner which cause more problems that the spin itself. The sideways turn of the body should be exaggerated and the unwinding must be delayed a bit so that the ball delivered with the maximum drag across the body.

Left Hand Bowling

The principles of bowling spin with the left hand are the same as that of the off spinner expect that everything is in reverse. the same techinques apply to left arm spinners though their natural swing or swerve is into the right hander and their natural turn is away from the right hander. Bowling round the wicket has several advantages for the left arm spinner, especially when he bowls with a slight shine still on the ball. The ball tends to come into the batsman in the air and breaks away from him as it spins. Another weapon in the left arm spinners armoury is the arm ball which comes in with the arm and then goes straigh on after pitching. He can get leg before victims easily with such a ball. The slight inswing to the right handder does the trick. The left arm spinner is a valuable member of the side because he can expect to be more economical than even the right arm off spinner. The chairman is a legbreak as blowed by the left arm spinner. It may be really worthwhile to view tapes of Bedi's bowling to find out the nuances of this craft.

Approach

All the spin in the world may be useless if it is not backed up by variations of flight. To be able to properly flight the ball, the spinner must bowl slow enough to set batsmen a problem in gauging where the ball is going to come down. By bowling all the ball to a standard arc the spinner will become so predictable that batsmen will counter-attack rather easily. Variations of flight and pace will come only with experience. Don't panic if at an early age any experiment sends the ball as full toss or a a long hop to the batsman. Strength of fingers is vital to bolwing spin. Learn alll possible excersie from your coach so that you can toughen your fingers early and make them extract spin oput of the ball. There is strength to be had for fingers in squeezing a rubber ball constantly. You must bowl a length on true pitches and await an error from the batsman. Too many eperiments on a good pitch may make you so expensive that the captain will switch back to medium pace for containemt. You must wear down the batsman by accuracy even as you probe his weakness by varying your trajectory. There is absoutely no short cut to sucessful spin bowling. Ti will come only with practice and experience. Learn to use the width of the crease in varying the line. Modern cricket is loaded aganist the spinners. The batsmen use such heavy bats today that they can club you out of the game. Patience is the mother of all virtues. You must have it in large quantities to successful as a spinner. But then spin bowling is such an enjoyable craft which does not take too much out of your body.

Fielding

To field a ball and to catch it are the most natural human activities. To throw it as natural too. The whole sphere of fielding activity is most enjoyable. A team's efficiency is often reflected in its fielding. All eleven can contribute directly on the field, a catch well taken, a stinging shot stopped on the square and a run out effected with a fine throw can well turn a match around. Above all, fielding is fun. Modern cricket, with the accent on limited overs cricket, demands fielding standing standards of the highest order. If you are not a good fielder you may no9t even fit into the scheme of one day things. Take heart in the fact that almost anyone has the inbuilt capacity to improve his fielding. Take Azahruddin as your idol. See how easily he gets to the ball and whips his throw into the 'Keeper' See how confident men like Kapil Dev and Azharuddin are when they are about to catch batsmen off huge skiers.

Fundamentals

(1) Keep your eyes on the ball all times – whether you are fielding a ball on the ground or you are catching it; (2) Move swiftly behind the line of the ball and as far as possible towards it even as it is coming to you; (3) Make sure that your body gets in behind the line of the ball as second line of defence to your hands; (4) Whenever any fielder throws the ball to the keeper or to the bowler's end, It is the duty of fielders in suitable positions to provide a backup; (5) if you are not in a close catching position, You must walk in with bowler when he is running in to bowl; (6) Try to let your hand give with the ball. Don't grab the ball. If you do, you will find it will spill out almost as often as it stays in the plam. Bend both hips knees so that your head is down when you are about to field the bail; (7) Get

quickly into a side-on position so that you throw the ball to either end for a run out or return it to the keeper when you are sure the batsmen are not going to attempt a run; (8) Your backfoot should be side-on to the ball; (9) As far as possible, throw the ball on the full to the keeper or bowler; (10) Hitting the stumps to effect a run out may be thrilling but this should be attempted only when there is no time for the keeper or the bowler to reach the wicket. If you hit the stumps when it is futile to do so you may give away overthrows or even see the ball deflect off the stumps for more runs; (11) When you take a catch, kepp the ball for a few seconds to show that you are in control. Don't throw it permaturely in the air to celebrate the catch, you might spoil the act by losing your grip on the ball; (12) The stance is importance for close-in fielders. The body should be balanced and ready to take off in any direction. Stay down until the ball has been well sighted and you are moving to take catch. Keep your head still and watch the ball or when at first slip or when 'keeping, watch the outer edge of the bat. Practice methods A good coach can organise various practice sessions and also make them as intersting as possible. A coach must impart the importance of enthusiatic approach to fielding. A roller offers an ideal angled surface to send the ball in suprising trajectories at fielders. But there is nothing like a batsman in front of a slips cordon edging full pitches to the catchers. This is the best possible simulation. Don't let cricketers laze at the nets after batting or bowling. Keep them occupied with intresting fieldings Practice.

Wicket-Keeping

The wicket-keepers is one of the key members of the team. A good keeper can inspire confidence in his team. Particularly in the bowlers. The wicket-keepers needs more mental stamina than even the fastest of bowlers. He must be ready to keep the whole if necessary Fundamentals: (1) The weight of the body should be evenly balanced on the heels; (2) The feet should be apart an approximate distance of a foot and half from each other; (3) Crouching should be comfortable with the head down and the whole stance relaxed; (4) the fingers should be pointing downwards or upwards in collecting high balls or, sometimes even sideways but they should never point at the ball; (5) Concentration should be total on every ball bowled because each one is a potential wicket taker; (6) A good wicket-keeper should be fully aware of his position in relation to the stumps. He should watch the ball and not what the batsman is doing; (7) Never grab the ball. Let your hands give with the ball. The hands must give a few inches so that the ball has less chance of leaping out of the gloves. 8) Rise along with the ball, not too early Stance. The stance should be comfortable. A good coach can demonstrate the basic principles of wicket keeping and also the movement of the feet. Remember that there are no halfway positions: either the 'Keeper stands up or stands back. Syed Kirmani is the ideal 'keeper to watch in action Note the movement of his feet especially when he goes down the legside to take. Footwork is a essential to keeping as it is to batting. By moving his feet the 'keeper gets right behind the line of the ball. A good 'keeper' is also the best adviser to the captain on what his bowlers are doing and what are the possible weaknesses of the batsmen.

Equipment

The wicket-kepping pads should be light and short Flexibility is everything. Golves are extremely important. The face of the gloves should be in good condition and must not be allowed to become too smooth. Wornout gloves should never be used becayse this may hurt the finger. Inner gloves of soft leather provide extra support.

RUNNING BETWEEN THE WICKETS

Call out often after every ball. Say 'yes' and no' decisively, 'Wait is also a good call as it will put yoour partner on the alert for a possible run that may not be there to begin with but may materialise if there is a misfield back up immediately after the ball leaves the bowler's hand. Run the first run as though it is the winning run. Remember that over 25 percent of all runs scored come in singles. Slide your bat from a few yards in front of the crease you are running to. Kepp off the pitch. Note the position of all fielder particulars the good ones. You must also know soon who are left handed throwers in the side. Keep you eyes on the ball while turning for the second or third run. Change your bat hand if necessary to keep yourself in sight of what happening. Keep out of the way your partner while running between wickets. The correct order of doing things in running more than a single is run, turn and call. Don't waste tiome by slowing sown in front of the crease you have to reach. The coach should reach hsi pupils the importance of running which is the best demostrated by getting them to pad up and run the length if the pitch in paries after calling. Remember the golden rule that no run is worth so much that you can risk losing a wicket. The only exception may be in the slog overs of limited-overs cricket.

Equipment Bat

For a young boy to learn the art of batting, the choice of a bat, of suitable size and wieght, is of utmost importance. It is best for the young batsmen to use a bat which feel light rather than one which feels heavy. There is little benfit to be had from using a heavy bat too early. especially when one is just beginning. Don't get taken in by the talk of heavy bats in modern cricket. You can use it but only when you are sufficiently strong to be able to handle it. Pads Careful instruction should be given by the coach the importannce of selecting batting pads that will suitable to young palyers. pads should provide adequate protection from injury, fit comfortably on the legs, should not be cumbersome or too heavy and must not impede or restrict quick and easy movement.

Players appearance players should always be neatly and correctly dressed. All boots should be clean and properly sprigged, either with spikes on the soles and heels or with spikes in the soles and heels or with spikes in the soles and hardened ribbed rubber on the heels. Bad sprigging may easily be the cause of a spilled catch or a run out. A bowler will not be able to get a good foothold on a hard or wet surface. No Player should be worn a wrist watch or ring on the field. Nor should one carry a cap in a pocket. A protector should be worn at all times by the batsmen and the wicket-keeper and the fielders right near the bat. Comfortable well fitting sock should be worn. In the case of fast bowlers, it is quite often good policy to wear two pairs of socks. It is recommended that batsmen and keeper wear only short socks. Not only so they give a smarter appearance but are also more comfortable. Fold the trousers in fromt of the legs and strap the pads tight to them Batting gloves should be worn at all times in all grades on the game. This gives the player protection as well as comfort in gripping the bat. Bad equipment, or lack of equipment in a match or the nets can often be very damaging to a player's confidence. often players who are hurt in the nets would have been spared the agony had they been wearing proper equipment can also lead a player intop gaining the bad habit of not getting behind the line of the ball. No bowler can do justice to himself and his team if his noots are ill-fitting, if his toes are being pinched, if the sprigs are piercing the material and keep getting at his feet, if blisters are being caused by chafting and if toenails are being compressed. A proper grip of the ground is also vital. pay a lot of attention when you are buying your first pair of cricket boots. Boots must be laced tight to give support to the ankles. Blisters must be avoided. An additional inner sole is often helpful. A little vaseline applied between the toes may help avoid friction and stop the blisters. Aids to foot comfort are not sufficient in themselves. Boots must fit well. Helmet may become necessary at a later stage when young batsmen come across bowlers who are really pacy. It would be much better to learn to play the game without them. It is not too difficult to adjust to the helmet once you go up the ladder and you need the protection of this modern headgear.

Safety and Physical Fitness Safety

The first task of a coach should be the safe running of the practice nets. The problem of injury to trainees should not occur because of poor safety consciousness. The wicket should be well rolled and the grassness. The wicket should nbot be so wet or damp that they cause injury to batsmen by unpredictable bounce. Matting wickets must be watered and rolled before every sessions. The surface should be even and free of gravel. The mats should be hammered in tight. Otherwise the ball will bounce awkwardly. All nets should be in good condition. There should be no holes. Otherwise, batsmen in adjacent nets may be injured. Never allow a batsman to apd up in such a position on the field that his body is exposed to the ball being struck by the batsmen in the nets. Those not batting should keep their eyes on the ball unless they are secure behind the nets. The bowler who walks back to the mark should be careful about the balls being struck. While bending to pick the ball near the bowlers runup area watch out for other bowlers who may be running in. Physical fitness. The importancem of itness can never be overstated.

The game can go on for several hours in a day over several days. If a player is not fit he is more likely to commit a mistakes from fatigue. Batsmen may commit silly mistakes after scoring 30 or 40 runs because they are tried or are unable to concentrate. If the wicket-keeper is not fit, he may lose concentration and miss a vital catch or a stumping. A bowler may send down loose balls because he is tried. It is rather important for coaches to devise a training schedule. It is not good practice for a player to turn up at matches while not being in regular practice. Each player should choose a set of excercise, in consultation with the coach, which are particularly suitable to his game skills. These excercises will vary greatly in form and contennt depending on wether the player is a batsman, a fast , a spin bowler or a wicket keepers. As a mean of limbering up before practice, some running floor excercise and short springs are advisable for wicket-keeper situps are recommended.

Batsmen Endurance building is basic to any fitness programme. This is best achieved by distance running say 3 miles a day the speed varying from individual to individual It is very important to consult a physical trainer on the schedule of exercises to be followed. Bowlers Endurance training should be more rigorous Exercises for the hip, back shoulder arm and the groin are important. Fast bowlers must run many miles in a week to a set fitness schedule if they are to maintain their strength and fitness. Short sprints, of 50 to 60 meter, are also advised. light weight tranining for the shoulders, arms and legs are highly recommended. Back and arm muscle building excercises are essential for gaining extra power and strength. Always warm up properly before trying to bowl flat out. Don't be inflexible in field-setting. Although there are sensible field to set for all types of bowlers don't forget batsmen too. have strengths and weaknesses to contain or exploit and always remember the state of the game. If you have a lot of runs in hand, you can afford to buy wicket – encouraging the batsman to hit over the top in the hope that he will miscue and keeping fielders in attacking positions Don't be proud. A bowler might think a batsman shouldn't hit aganist the spin to deep mid wicket, but if he keeps doing it sucessfully, put a man there. If a batsman is sucessful with unorthodox methods. You've got to response to them. Look on field-setting as a battle of wits between you and the batsmen you and batsman – don't be afraid to tempt him into indiscretion. Fields for one day games The object of the one-day game is to stop the batsmen scoring ruuns. not entirely of course, It is very useful to take wickets too, particularly early in the innings because a steady start without losing wickets can be the basis of heavy scoring later. And it can be important to take wickets later on, because nothing helps to slow down a batting side's momentum when they are preparing for an onslaught more than the loss of wicket or two. But having admitted those qualifications it is still true to say that the bowler is required to keep runs down as his first priority most of required to keep runs down as his first priority most of the time in limited-over cricket. That of course also varies slightly from one brand to another – 60 over games means that fast bowlers will attack with the new ball more than they would in the 40-overs match. Fields reflect this. Even in the start, the fast bowler is more likely to have two slips and a gully with a third man firmly on the ropes than a more attacking field with three slips. But the introduction of the circle has changed things again. It means captains can no longer push everyone back on the ropes, and that ecourages them to be more attacking early innings because it means that getting some wickets at that stage is more important thean it used to be. This leaves us with a fairly attacking field in the first illustration not that dissimilar of the ordinary field for the fast bowler. It can soon change if the batsmen survive the opening overs and begin to get on top. one day field for a seam bowler. Long leg, is movable, as in mid wicket. Mid-on and mid off are generally two of the four fields in the ring. along with extra cover and fly slip, although one can push deeper if either square leg or mid-wicket comes into the circle. For spin bowlers in the one day game, line becomes all important. Off spinners will generally bowl to six fielders on the legside, and aganist their usual practice slow leftarmers, who generally have a five-four off-side field will instead attack middle and leg with five-four leg-side field. In the thrid illustration we can see the six-three field for the off-spinner, deep point, mid-off square leg and short mid-wicket are the four fielder in the circle Extra cover is half-way, as in fine leg, and deep backward square leg, deep mid-wicket and long-on pushed right back That is the basics of the field for the slow left-armer, if he is also firing it on middle and leg. One of the players behind the wicket on the leg-side is the most likely to be sacrificed to move over to give him a ring of four on the off with short, fairly square third man, cover, extra cover and mid-off. If he is going to bowl in orthodox fashion, the square leg will also move onto the off-side, with deep backward square leg moving up to stand behind square but saving one. The remaining leg side fielders are thus placed for front foot shots.

HOCKEY

History

Hockey's birth place is Asia and Persia is credited with having devised it about 2000 B.C. It is said that Greeks and Romans played hockey but nothing is known about the nature of the game that they played. The earliest mention of the present day game dates back only to 1527, when the Galway Statutes included 'hokie'- the hurling of little ball with sticks or staves in a list of prohibited games.

Modern hockey, as created in England, resembles closely games once popular in the British Isles and there is no doubt that hockey's immediate fore-runners were the Scottish shinty, the English and Welsh bandy an the Irish hurling.

The game has witnessed numerous refinements over the years. Among the earliest refinement was the prohibition of raising the stick above shoulder level.

Hockey became popular in India when the British Regiments played the game in India and introduced it in the British India Regiments who quickly picked up the game. The first hockey club was formed in Calcutta in 1885-86 followed by Bombay and Punjab. The Bengal Hockey was the first Hockey Association in India founded in 1908. The second was formed in 1920 in Karachi by the name 'Sind Hockey Association'. In the Olympic games, India played hockey for the first time n 1928 held in Amsterdam. She reached the finals defeating Austria, Belgium, Denmark and Switzerland. In the final, India defeated Holland by three goals to nil.

Achievements

Hockey is the National Game of India. Unmatched excellence and incomparable virtuosity brought India a string of Olympic gold medals. The brilliant Indians brought a touch of black magic to their play and the ball juggling feats of the Indians were a sheer delight.

The Golden Era of hockey in India was the period from 1928 – 1956 when India won 6 consecutive gold medals in the Olympics. During the Golden Era, India played 24 Olympic matches, won all 24, scored 178 goals (at an average of 7.43 goals per match) and conceded only 7 goals. The two other gold medals for India came in the 1964 Tokyo Olympics and the 1980 Moscow Olympics.

In 1956, after India won the last of its six consecutive gold medals, the manager of the Pakistan hockey team, Riazuddin Ahmed said, "This is the first time that we played India in the Olympics. The next time we play, the result will be different." His prophetic words came true in 1960, when after 28 consecutive victories in the Olympic Games, India lost 0-1 to Pakistan in the 1960 Rome Olympics final.

Organisations Involved with the Sport in India

The Bharatiya Hockey Andolan (henceforth referred to as Andolan) is a non-profit organization for raising the standard of hockey in India to world class standards. To achieve the above, the Andolan has focussed on an existing institutional setup – the university system of India, and created a framework for producing sporting talent out of this hitherto neglected resource base. The framework to be provided is the inter-university Dhyan Chand Tournament.

1995 was the inaugural year when the Andolan hosted the tournament with the Maratha Conference (total of 6 universities), covering the state of Maharashtra. In 1996, Ahimsa Conference (6 universities), which covers the state of Gujarat are also being included.

In 1997, the Adi Sankara Conference (10 universities of Kerala), Chola Conference (7 Universities of Tamil Nadu), Sri Venkateswara Conference (8 universities of Andhra Pradesh), and the Vijayanagara Conference (6 universities of Karnataka) will be included. At this stage 43 universities, spanning Western and Southern India, have been covered by the tournament.

In 1998, the Rajput Conference (5 universities of Rajasthan), Sanchi Conference (8 universities of Madhya Pradesh and environs), Indraprastha Conference (8 universities of Delhi and environs), and the Taj Conference (8 universities of Uttar Pradesh) will be covered.

1999 will focus on East India. The tournament will include the Kalinga Conference (7 universities of Orissa), Durga Conference (9 universities of Bengal), Nalanda Conference (9 universities of Bihar), and the Ganga Conference (9 universities of Uttar Pradesh).

This leaves the frontier areas of India. In year 2000, the tournament will include Brahmaputra Conference (5 universities of the North-East), and the Kurukshetra Conference (9 universities of Haryana, Punjab and Jammu and Kashmir). This results in a grand total of 120 Division I universities in the country.

Tennis

Tennis origin is almost unknown. Some people trust it came out as a variation of those ancient ball games practiced by Egyptians, Greeks and romans. Some other believe it comes from a roman game called "harpastum", and was adapted in the Basque country, where it was named "jeu do paume" because the ball was hit on a wall with the hands.

In the Twelfth Century, "paume" were spread all over France, with many modifications – rules and fields configurations. It was no longer played hitting the ball on a wall, but on a rectangle divided by a rope. Thus, "longue-paume" appeared, being played by up to six players on each side of the rope.

Later yet appeared the "court-paume", a similar game played indoors, but with complex rules and demanding a smaller area to be practiced. The sets took place within 11 games, and the winner team was the one that won six games first. That's why, nowadays, six games define a set.

The racket, Italian invention, appeared in the Fourteenth Century, making the game less violent, more interesting and easier to be played over France. The sport crossed the English Channel and was soon known all over England. King Henry VIII one of the most skilled players.

With the appearance of the rubber ball, Nineteenth Century, appeared in Great Britain an outdoors tennis, or "Real Tennis", quite similar "court-paume", but with no lateral or services walls.

In 1873, the English major Walter Wingfield in a mission in India, answering to the bored English ladies who had nothing to do, studied the games that had come before tennis and changed their rules. In1874, Wingfield registered the patent of the game, naming it "Sphairistike", homage to the Greek people who called the games with balls like that. Although, this name didn't last for long, being soon replaced by Tennis, that probably comes from French "tenez", which means CATCH! and was shouted when the player served and shot the ball to his/her opponent.

Tennis – called by then "tennis-in-lawn" because it was played on grass courts, were soon spread over India, taken by the enthusiastic ladies, reaching England and putting "cricket" down.

Then, tennis had its rules changed and smoothed to be played over the whole world.

In Brazil, tennis was introduced by foreigners at "Rio Cricket", in Niterói and at "Wahallah", in Porto Alegre, by 1898, being under coordination of Confederação Brasileira de Tênis and Federações Estaduais, both subordinated of Conselho Nacional de Desportos.

Nowadays tennis is not just a simple sport; but an international event, through the many tournaments around the world, watched by millions of people. The prizes, patronizing and players – real international personalities – also collaborate to the party that modern tennis has become, effectively.

GOLF

History of Golf in India

In India you can play golf almost anywhere, for this sport is widely played by a cross-section of people. In the hills and high Himalayan fastness, in metropolitan cities and in small towns, by lakes and forests, or sorrounded by tea estates, out in the deserts and in old cantonment the flavour of India is visible everywhere.

India was the first country outside Great Britain to take up the game of golf. The Royal Calcutta Golf Club, established in 1829, is the oldest golf club in India and the first outside Great Britain. Because of the British rule, the eighteenth century saw a mushrooming of new golf clubs in India. The founding of the Royal Golf Club of Calcutta in 1829 was followed by the now-defunct Royal Bombay Golf Club in 1842 and the Bangalore Golf Club in !876. The Shillong Golf Club incorporated a golf course in 1886.

Golf has already been played in India for 59 years before the first major course was opened in the USA and Europe in 1888. By the end of the 19th century, India had a dozen golf clubs.

What makes golfing in India exciting is the diversity of its courses. Not only does it have the oldest gold club in the world outside Great Britain, but also the highest, at Gulmarg (altitude 2,700 metres) in Kashmir. There are golf courses in the mountains, plains, deserts and at beach resorts. The environment of each course is unique in its culture and history, highlighting all that makes India a diverse destination. In fact, it would not be wrong to say that one of the best ways to experience India is through its golf courses.

Most of India's courses are well connected by road, rail, and air, and have excellent accommodation facilities. Unfortunately, India still has to rely on the West for golfing equipment, and visitors are advised to carry their own sets, with an ample supply of golf balls.

Till the '50s, golf clubs in India were affiliated to the Royal Calcutta Golf Club, which followed the rules of St. Andrews in Scotland. In December 1955, a group of golfers got together to form the Indian Golf Union as the controlling body for the game.

The Indian Golf Union is now affiliated to the World amateur Golf Council, and has done a great deal to promote golfing in the country. In 1957, it started its first training camp at the Royal Golf Club in Calcutta, where assistant professionals and caddies were brought from all over the country and trained to teach golf.

The year 1958 is a landmark in the history of Indian golf. For the first time, the amateur Indian Championship was moved away from the Royal Calcutta Golf Club to be played alternately at Delhi, Bombay and Calcutta. The most important annual event in the calendar of the Indian Open Golf Championship was first played in Delhi in 1964, and won by the Australian golfer, Peter Thompson.

Golfing in India has come a long way, and a large number of Indian players now compete on the international circuit. Golf enthusiasts continue to grow in numbers, and new courses are added almost every year. And what could be a better feather in India's golfing cap than the fact that Delhi was chosen to host the first ever golf competition for the Asian Games in 1982.

Golf Culbs in India

Bangalore Golf Club
No.2, Sankey Road,
High Grounds, Bangalore
560001

Chandigarh Golf Club
Sector 6
Chandigarh

Madras Gymkhana Club
Race Course, Guindy
Madras

Bombay Presedency Golf Club
Dr. Choitram Gidwani Road,
Chembur, Bombay 400 074

Royal Calcutta Golfing Club
18, Golf Club Road
Calcutta

Ootacumund Gymkhana Club
Ooty Golf Club,
Ooty

Kodaikanal Golf Club
Golflinks Road,
Kodaikanal.

Delhi Golf Club
Dr. Zakir Hussain Marg,
New Delhi.

Gulmarg Golf Club
Gulmarg
Kashmir.

Shillong Golf Club
Polo Ground,
Shillong

Kabaddi

Though kabaddi is primarily an Indian game, not much is known about the origin of this game. There is, however, concrete evidence, that the game is 4,000 year old. It is a team sport, which requires both skill and power, and combines the characteristics of wrestling and rugby. It was originally meant to develop self defence, in addition to responses to attack, and reflexes of counter attack by individuals, and by groups or teams. It is a rather simple and inexpensive game, and neither requires a massive playing area, nor any expensive equipment. This explains the popularity of the game in rural India. Kabaddi is played all over Asia with minor variations.

Kabaddi is known by various names viz. *Chedugudu or Hu-Tu-Tu in southern parts of India, Hadudu (Men) and Chu – Kit-Kit (women) in eastern India, and Kabaddi in northern India.*

The sport is also popular in Nepal, Bangladesh, Sri Lanka, Japan and Pakistan.

The Game

In Kabaddi, two teams compete with each other for higher scores, by touching or capturing the players of the opponent team. Each team consists of 12 players, of which seven are on court at a time, and five in reserve. The two teams fight for higher scores, alternating defence and offense. The court is as large as that for a dodge ball game. The game consists of two 20 minute halves, with a break of five minutes for change of sides.

The kabaddi playing area is 12.50m x 10m, divided by a line into two halves. The side winning the toss sends a 'raider', who enters the opponents' court chanting, 'kabaddi-kabaddi'. The raider's aim is to touch any or all players on the opposing side, and return to his court in one breath. The person, whom the raider touches, will then be out. The aim of the opposing team, will be to hold the raider, and stop him from returning to his own court, until he takes another breath. If the raider cannot return to his court in the same breath while chanting 'kabaddi', he will be declared out. Each team alternates in sending a player into the opponents' court. If a player goes out of the boundary line during the course of the play, or if any part of his body touches the ground outside the boundary, he will be out, except during a struggle.

Lona

The team scores a lona (a bonus of two points), if the entire opposition is declared out. The game then continues by putting all the players on both sides. Matches are staged on the basis of age-groups, and weight. Seven officials supervise a match – one referee, two umpires, two linesmen, a time keeper and a scorer.

Types of Kabaddi

In India, Kabaddi is recognised in three forms:

- Surjeevani
- Gaminee
- Amar

The 'Surjeevani' form of Kabaddi is played under the Kabaddi Federation of India, and is governed by its rules and regulations. In the 'Surjeevani' form of Kabaddi, one player is revived against one player of the opposite team who is out. i.e. one out, one in. The duration of the game, the number of players, the dimensions of the court, etc. have been fixed by the Kabaddi Federation of India.

In the 'Gaminee' type of Kabaddi, there is no revival. When all the players of team are out, the game ends. So there is no time limit in this category.

In the 'Amar' form of Kabaddi, whenever any player is touched (out), he does not go out of the court, but stays inside, and one point is awarded to the team that touched him. In this way, one point for each touch of the opposite team, i.e. to the team who touches the anti player. This game is also played on a time basis, i .e the time is fixed.

In the northern part of the country, i.e. Punjab, Haryana, Uttar Pradesh and Delhi, this game is played in a circle. This is known as 'Circle Kabaddi' or Amar Kabaddi. If it is played without a court, as in some places, it's called 'Goongi Kabaddi'. The Goongi Kabaddi is nothing but wrestling between two players.

The first world Kabaddi championship in the history of the game, was organised in Hamilton when approximately 14,000 people packed Copps Coliseum, to watch stars from India, Pakistan, Canada, England, and the United States compete.

The Kabaddi Federation of India (KFI) was founded in 1950, and it compiled a standard set of rules. The Amateur Kabaddi Federation of India (AKFI) was founded in 1973. The AKFI has given new shape to the rules, and it has also the rights of modification in the rules. The Asian Kabaddi Federation was founded under the chairmanship of Mr. Sharad Pawar (Maharashtra).

Some of the Arjuna Award winners are Sh. Sadanand Mahadeo Shetty, Sh. Sadanand Mahadeo Shetty, Sh. Shakuntla Panghar Kholavakar, Sh. Shantaram Jaatu, Kumari Monika Nath, Kumari Maya Kashi Nath, Rama Sarkar etc. Kabaddi was one of the demonstration games at Asiad '82.

QUALITY IMPROVEMENT IN ELEMENTARY TEACHER EDUCATION

Introduction

Since independence the country has made impressive progress in fulfilling its constitutional commitment of providing free and compulsory education to all children up to the age of 14, i.e. 8 years of elementary education. In 1950-51, there were about 210 thousand primary and 14 thousand upper primary schools. By the year 1999-2000 there numbers have increased to 642 thousand and 198 thousand, respectively. Yet the goal of achieving universal elementary education seems to have receded away at a faster pace in spite of the best efforts of the State, and thus far has remained out of reach. Reasons for it are not hard to see. In addition to clearing the backlog of 60 million out of school children the State has to arrange access for education to 20 million children born each year. Therefore, instead of giving an historical account of the various initiatives that were taken up by the State during the past fifty years for achieving universal elementary education and of reasons why the target period of ten years that lapsed in 1960 had to be continually shifted from time to time, it would be prudent to focus on the recent initiative of the Government of India, called the Sarva Shiksha Abhiyan (SSA): An Initiative for Universal Elementary Education.

The broad targets of the SSA are that all eligible children will be enrolled in school by 2003; that they will complete five years of schooling by 2007 and of eight years by the 2010. There are many dimensions of the SSA scheme. Some of the dimensions that have bearing on the mandate given to the NCTE in its Act are the analysis of the curriculum of pre-service courses vis-à-vis task profiles for teaching at the elementary stage of schooling; recruitment qualifications of teachers for the primary stage, upper primary stage and for the integrated elementary stage; innovations in pre-service teacher education for this stage and their effectiveness; implications of appointment of Para-teachers on the status of teachers. It is in this context the two-day National Consultation has been arranged by the NCTE.

It should not be found surprising that because of the heterogeneity of conditions of school education in the different States there is neither uniformity in the structure of elementary school stage nor in the curriculum of the pre-service teacher education for this stage. In some of the states the upper primary stage is stapled with the secondary stage and graduate teachers with B.Ed. degree are appointed for teaching and in some of the states it forms a part of the middle-school and teachers with class 12 and two-year diploma are appointed for teaching. The University of Delhi has introduced a 4-year pre-service course, called the B.El. Ed., for teaching at the elementary stage and the Indira Gandhi Open University offers a 2-year diploma course for untrained teachers in service. In the wake of the experience of the DPEP scheme many of the states have introduced curriculum reforms in pre-service teacher education for achieving quality in elementary education. Also, there is a palpable concern about the irrelevance of the curriculum of the basic teacher training diploma course that is being followed in the country particularly when the context of schooling for living effectively in the 21st century has radically changed. The UNESCO document Learning the Treasure Within has identified the four pillars of education, learning to know, learning to do, learning to live together and learning to be. As the world has entered in the information age and is inundated by an unprecedented information explosion, it is being realised that the basic skill to be learnt now is that of learning how to learn, for each person has to develop an attitude of lifelong learning. Also, now the parents are asking for a greater say on the education to be given to their children. Therefore, in such a context the planning for education necessarily has to be grassroots up rather than being driven by a top down approach. Many experts in teacher education have given thought for working out strategies for improving the quality of elementary teacher education and for making it contextual. In planning this two days national consultation meeting effort has been made to bring together a galaxy of experts from the categories of policy makers, educational administrators and teacher education. It is hoped that this group will discuss different aspects of pre-service teacher education for achieving quality in elementary schooling and also the allied issues such as teacher recruitment and the status of teachers. In the following a brief analysis of issues that have been scheduled for discussion in this meeting has been given.

For teaching up to the primary stage it is generally accepted that subject teachers are not required and each teacher should be able to teach all the school subjects. Therefore, the recruitment qualification of a pass in class 12 and a two-year pre-service diploma course laid down by the NCTE has received endorsement from most of the states. Some of the states that traditionally have been recruiting teachers with a pass in class 10 and a certificate course of one year duration have been given time for switching over to the NCTE qualifications. For teaching at the upper primary stage subject experts are appointed. For teaching mathematics, or science, or social studies, or English or a regional language it would be essential that the concerned teacher should have studied that subject at least at the level of classes 11 and 12. Therefore, for teaching at the upper primary stages many of the school systems such as the Kendriya Vidyalaya Sangathan, the Navodaya Vidyalaya Samiti appoint graduate teachers having the B.Ed. degree. In this context it has gained urgency to answer whether the curriculum of the two-year basic teacher education course provides professional competence for teaching the entire span of elementary stage, i.e. from class 1 to class 8 or is valid for teaching the primary stage, i.e. from class 1 to class 5 only. An effort has been made in compiling relevant information from as many states as possible on their recruitment rules and in analysing the curriculum of their basic teacher training courses. These data will be presented at this meeting.

There are other curriculum related issues such as making school internship an essential component of the pre-service course, duration of the course and its theoretical and praxis components that will be discussed in this consultation meeting. As the different states have tried to improve the quality of their elementary school education through initiatives in pre-service and in-service teacher education, this national level consultation meeting should function as a forum for exchanging experiences. The challenge is to evolve a framework for pre-service teacher education in the context of the new role of teacher who is expected to act as change agent for inculcating in children the values for living harmoniously in a pluralistic secular society and for developing in them the ability of learning how to learn and for making education an instrument not only for one's personal good but also for the general societal good. Experiences of four State Governments on pre-service teacher education, namely

Andhra Pradesh, Karnataka, West Bengal and Uttar Pradesh will be presented at this meeting by their Secretaries and their Directors of the SCERT. Also, innovations in pre-service elementary teacher education tried out by three universities, namely, Delhi, Jamia Millia Islamia and IGNOU will be presented in the meeting. The University of Delhi has developed a 4-year B.El.Ed. Course specially designed for preparing elementary school teachers. This course is being offered by some of its colleges as an integrated programme taught jointly by their content faculty and faculty drawn from disciplines cognate to education. The Institute of Advanced Study in Education (IASE) of the Jamia Millia Islamia has developed a two-year diploma course on pre-service teacher education for preparing elementary school teachers. The IGNOU has developed a two-year distance education diploma course for untrained elementary school teachers in service. Experts with backgrounds of teaching and research in the formal teacher education system, and those who have worked at the grassroots level with elementary school teachers, those who have been policy makers and those who are or those who were educational administrators would be sharing their experiences and vision for pre-service teacher education.

It may be safe to presume that a significant outcome of this consultation meeting would be the development of a curriculum framework for pre-service course required for preparing teachers who by playing the role of facilitator of learning can transact the new school curriculum. But for effective implementation of programmes of teacher education it will be crucial that teacher educators possess professional attributes such as competence and commitment for teaching. Therefore, the first task of the State Governments would have to be to change their policy of posting secondary school teachers, who generally neither have experience of teaching at the elementary level nor possess professional expertise for teacher education, as teachers in the District Institutes of Education and Training (DIETs) or as faculty in the State Council of Educational Research and Training (SCERT). A separate cadre of teacher educators may have to be created by following the qualifications laid down in the NCTE regulations. Recent study on the DIET scheme carried out by the National Institute of Educational Planning and Administration (NIEPA) has revealed that if this scheme has not achieved all that was expected of it the responsibility can be squarely laid on the placement of persons unsuitable for carrying out the tasks to be performed at these institutions. It is for this reason alone, even as of now, many of the DIETs have not been able to fulfil the NCTE norms and standards and their pre-service programme have remained as unrecognised. If in a district its DIET is an unrecognised institution it cannot run pre-service programme and the problem of providing trained teachers in the schools in that district get further compounded for that DIET cannot also function as a Resource Centre for the distance education programmes. The SCERT of a State is the nodal centre for coordinating programmes of teacher education. If care is not exercised in appointing faculty in a SCERT by matching qualifications and experience with the task profiles required for pre and in-service teacher education, the benefit of a crucial instrument for monitoring quality of teacher education in that State may not be available. It is for these reasons in the 10th Five Year Plan in the central scheme for teacher education creation of a separate cadre of teacher educators for appointment in DIETs and the SCERT has been made a pre-requisite for receiving central assistance. Another important category of institutions that were expected to contribute to improvement of the quality of elementary teacher education through their pre and in-service courses and research programmes were the Institutes of Advanced Studies in Education (IASE). The IASE were to run M.Ed. degree course with a specialization in elementary teacher education and also conduct in-service courses for DIET and SCERT faculty. Therefore, for achieving the objectives of the SSA it would be necessary that a network of DIETs, SCERT and IASE be put into place so that these institutions may provide support to each other.

Induction of Para-teachers for providing opportunity for schooling in remote habitations seems to have spread its tentacles even in schools located in the urban areas. With the appointment of teachers on payment of fixed remuneration the status of teaching as a profession has received a hard blow. The financial constraint of the State and its will to provide access to schooling to all children may have been the compulsion for appointment of Para-teachers. If the quality of education that children studying from Para-teachers has to be ensured the issues such as the nature of induction training and subsequent training for helping them discharge their teaching tasks with competence would have to be answered through research studies. It is in this context some of the states have been asked to include in their presentations their experiences of Para-teacher schemes.

In summing up it would be in order to mention that recently the NCTE has carried out pioneering experiment on in-service education of teachers by using the Direct Media Service (DMS) of the WorldSpace. The WorldSpace is a wireless delivery system of multimedia information from a satellite with a footprint of 14 million square kilometres. Lessons in multimedia were delivered to teachers in their computers connected with a PC-adapter to a 10 cm antenna for receiving data at the speed of 128 kbps. The success of the experiments that were carried out in end of November 2001 in use of advanced information and communication technologies for in-service education have opened the possibility of making available to teachers in schools throughout the country lessons given by experts appropriate for different levels of education and that too in multimedia.

Value Orientation in Teacher Education

Since independence education system in the country has expanded very rapidly. In spite of the recommendation of the several commissions on education that education in human values should be made an integral part of the curriculum, it is hardly visible in the State's schools, perhaps, because of lurking suspicion that value education might be used for religious education. India is a multi-religious country and comprises of multicultural societies. The constitution of the Republic of India is based on the concept of secularism. Therefore, it is imperative to distinguish value education from religious education or even education about religions.

As a result of quick economic growth, influence of western culture, over mechanisation, urbanisation and craving for materialistic life there has been a loss of values and of the value system at the individual level and in the country as a whole. Materialistic needs and never ending lust to earn more and more by putting in less and less effort, therefore, have to be balanced by a value-based life and by inculcation of an attitude that earning money is for leading a respectable life and for helping others who are disadvantaged. Where and when this value orientation should take place in the life of any person? It should begin from home, be buttressed by the community and be entrenched positively by one's school. The kingpin in the schooling process is the teacher. If the teacher is personally committed to the values and practices them in his/her own life, it is a foregone conclusion his/her students will imbibe the values for which teacher stands. It is for this reason only those teachers who leave deep impact on their students are remembered and also revered. Therefore, if values have to be nurtured in children it would be crucial that their teachers function as role models. For helping teachers in internalising values that should be developed in children through the schooling process, making education in human values an integral part of the curriculum of teacher education will be necessary.

Also, the country needs teachers with vision – as good teachers make good schools and a good nation. Teachers are the real masons who lay the foundations of a nation. They can make or unmake a nation. Teachers have to be competent and be committed to their task of nation building by developing values in the future citizens. In the UNESCO Commission Report, Education for the 21st Century – Learning the Treasure Within, emphasis has been laid on reorientation of pre-service and in-service teacher education for enabling teachers in acquiring intellectual and emotional qualities that a nation wants to be developed by them in their pupils. In the National Policy on Education (NPE) and the Programme of Action (1992) emphasis was given to value oriented education, and 10 core elements were made an integral part of the school curriculum. But their transaction has continued to remain fragmented. What is now required is to use the instrument of pre-service teacher education for ensuring that entrant teachers understand holistically the concept of education in human values, and are able to use direct and indirect techniques in formal and informal education for the development of values through the schooling process.

As the world has entered the Information Age another dimension to value education concerns information itself. This is to do with the nature of information.

Information is received by human beings through five senses – the sense of seeing, hearing, touch, taste and smell. Information as any one of us receives it is value neutral. Information of seeing is carried by Electro-Magnetic waves, which consist of vibrations of electric and magnetic fields. These vibrations when received by our eyes are transmitted as signals to the brain. The response of brain to information that is received by it is determined by its sub-conscious mind. A person may feel happy, threatened or worried by what he sees. A piece of rope when perceived as a snake can cause feeling of fear and a snake when perceived as a piece of rope gives the feeling of dealing with a harmless object.

Similarly, when information is received as voice, it comes in the form of physical changes in the medium that carries the sound waves, which generally is air. It comprises of condensation and rarefaction of density of the medium. The audio information through the eardrums reaches the brain. When an audio information reaches the brain response of a listener to that information is also determined by its sub-conscious mind. A listener may perceive it as music and get a feeling of happiness, or may perceive it as noise and become aggressive or get emotionally disturbed. Different types of reactions to an information have nothing to do with its nature. Information can either be an electromagnetic wave or an acoustic wave or even some molecules that may reach the nose. Information does not carry emotions. It is a common reaction to blame the information for the way an individual reacts to it. It is possible to change the quality of response to an information by raising the level of sub-conscious mind to a level of higher consciousness.

Therefore, teachers' will have to provide learning experiences for holistic development of mind, body intellect and emotions. So, the challenge of teacher education will be to prepare such teachers as can take care of the holistic education of children. This would require value oriented teacher education.

Some institutions have already developed professional programmes in teacher education in which value education has been incorporated in the curriculum and have been conducting such courses. The Ramakrsishna Institute of Moral and Spiritual Education (RIMSE), Mysore, has been conducting a value oriented B.Ed. course for over 25 years. The question before the teacher education is whether for imparting value orientation of entrant teachers a new course would have to be introduced or the entire programme of pre-service teacher education should be given a value orientation? The answer to this question could be given through a metaphor.

In sweetened milk sugar is not visible but its presence is felt by its pleasant taste. All of us prefer to drink sweetened milk than to drink unsweetened milk and eat sugar afterwards. Therefore, for giving value orientation to the curriculum of teacher education instead of adding to the existing courses a separate course it would be preferable to inseparably integrate value education in it.

There are two challenges that may have to be faced in providing value orientation to teacher education – stability and change. Stability demands preservation of culture and change demands technology. The National Council for Teacher Education (NCTE) is well aware of this challenge. The foci of its recent initiatives have been on developing resource materials on indigenous thoughts on education and promotion of use of information and communication technologies in school education through teachers. It has been playing the role of an innovator and that of a facilitator at the same time. Hence, the thrust of its recent efforts have been on production of multimedia resource materials on education in human values and conduction of orientation programmes for teacher educators with the help of experts and of institutions, which have specialised in the field of value education.

The NCTE has been conducting orientation programmes on education in human values for teacher educators and repackaging electronically the contributions of the experts and those of the participants. The outcomes of its programmes are distributed to each of its recognised institutions on multimedia CD-ROMs and through the World Wide Web of the Internet.

orientation? The answer to this question could be given through a metaphor. A sweetened milk is good medicine for a child but its presence is felt by its pleasant taste. All of us prefer to drink sweetened milk than to drink unsweetened milk and [illegible] sugar afterwards. Therefore, for giving value orientation to the curriculum of teacher education instead of adding to the existing courses a separate course it would be preferable to integrate value education in it.

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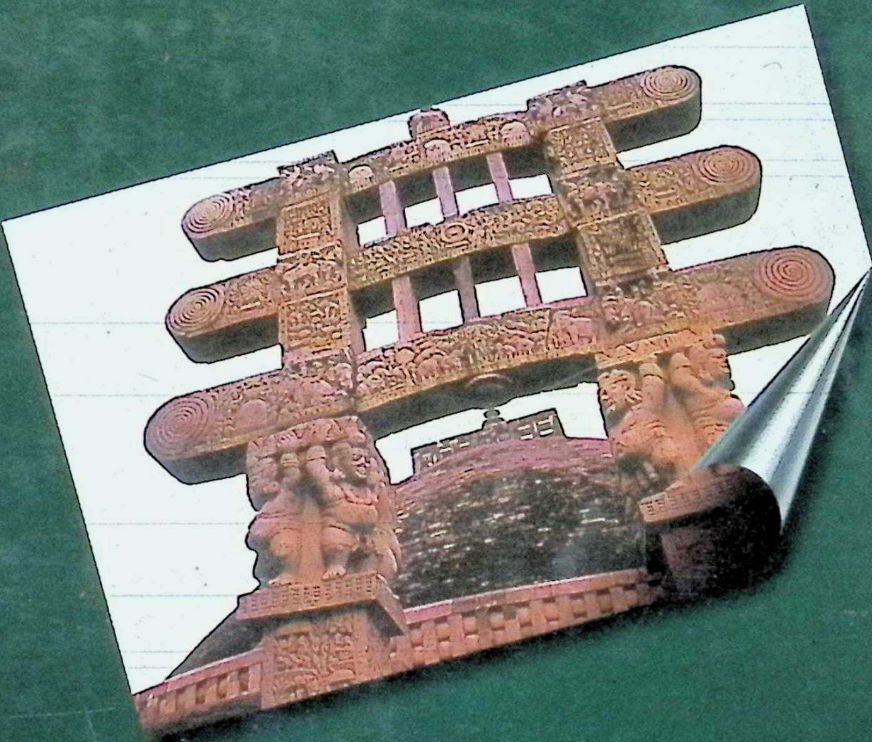

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